

DRAFT
PERFORMANCE WORK STATEMENT
Printing and Distribution Services
for
Enroute (High and Low Altitude Charts, U.S. and Alaska), and Enroute Area Charts

SECTION ONE – Composite Negatives

INTRODUCTION

The mission of the Federal Aviation Administration (FAA), Aviation System Standards (AJW), National Aeronautical Charting Group (NACG) is to provide charting support to the FAA's National Airspace System (NAS). NACG's charting products support civilian and military aeronautical navigation in the conterminous United States, Alaska, Hawaii, and the Caribbean-Gulf of Mexico areas. The Aeronautical Chart Team (ACT) produces both Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) charting products, all of which are critical to the safety of air navigation.

This contract encompasses the printing, finishing, and distribution of the IFR Enroute suite of charting products. This service has been on contract since 1981. NACG is located in the Washington, D.C. Metropolitan Area.

During the life of this contract, the Government Furnished Property (GFP) will change as NACG automates their production methods. This contract will begin with the government furnishing either four composite negatives or electronic .pdf files to the contractor for printing. As automated chart practices expand, the Government will reduce the number of charts printed using composite negative, and increase the number of charts printed using electronic .pdf files. The migration to .pdf files will be rolled out throughout the life of this contract, with the Government furnishing .pdf files to the contractor as they become available. It is estimated that by the end of this contract, a complete migration to .pdf files will be accomplished. Timelines to rollout each chart suite will not be established, however, NACG will notify the contractor three cycles prior to a suite of charts being automated.

The Performance Work Statement (PWS) is divided into two sections. Section One details the functions and requirements to be performed when printing charts from four composite negatives. Section two details the functions and requirements to be performed when printing charts from electronic .pdf files.

Given that NACG is transitioning the entire Enroute Chart suite to a digital process, this contract will be awarded for one year with two option years, plus the option to extend the term of this contract by six months from the expiration date. At that time, the contract will be competed with only the requirement to print via electronic .pdf files.

1.0. PERFORMANCE OF WORK (PWS)

1.1. The Contractor shall provide the necessary experienced personnel, materials, equipment, and facilities, except as may be otherwise provided herein by the Government, and perform the necessary functions to provide the error-free lithographic, finishing, and distribution services listed below:

- A. Lithographic Services include:
 - 1. Platemaking
 - 2. Printing
 - 3. Negative Control
 - a. Pick up every 56-days
 - b. Return every 56-days
 - c. Return at end of Contract
- B. Finishing Services include:

1. Trimming
2. Folding
3. Collating

C. Distribution Services include:

1. Preparing shipping labels, order invoices, and mail manifests.
2. Packaging
3. Distributing/Shipping

1.2 The Contractor shall be responsible for the pick-up of Government-furnished negatives in Glenn Dale, MD the completion of services shall meet FAA chart specifications, and the delivery of finished products to Government reviewers and to mail carriers, prior to the FAA-established effective date.

1.3. The estimated quantity of charts to be provided for under this contract is approximately 800,000 charts every 56-days. The prescribed performance schedule for production and dissemination of the designated charts has been predetermined by the FAA, and set forth herein. **The Contractor shall strictly adhere to the performance schedule specified. Chart customers are military as well as civilian; therefore failure to meet the rigid schedule and production failure of the Contractor to perform as prescribed could possibly result in legal actions to which the Contractor and the Government are named as parties.**

1.4 A Call Order will be issued to the contractor for work to be performed during the printing cycle. The Contractor shall review and acknowledge the assignment by signing and returning the Call Order to the Contract Officer prior to commencement of work.

1.5 When the Government requires by reason of urgency, delivery of any quantity of an item covered by this contract, prior to the earliest specified delivery date, and if the Contractor will not accept an order for the accelerated delivery, the Government may procure this requirement from another source or by separate negotiations.

2.0. DEFINITIONS OF TERMS/ACRONYMS: As provided in Attachment 1 (3 pages)

3.0 APPLICABLE DOCUMENTS – The appendices are provided as references to the PWS as specified herein. In the event of conflict, this PWS shall take precedence over the referenced documents.

- Appendix A - FAA/NACG EDI Formats (Tables 1-6)
- Appendix B - NGA EDI Format
- Appendix C - FAA/NACG Print Orders Report
- Appendix D - Sample - Call Order
- Appendix E - Joint Committee On Printing Paper Specification for JCP E-40, Chemical Wood Map Paper, Lithographic Finish
- Appendix F - Joint Committee On Printing Paper Specification for JCP G-50, Translucent Bond (no less than 25% cotton, remainder chemical wood).
- Appendix G - Estimated Chart and Collating Quantities Each Printing
- Appendix H - Chart Trimming/Folding Diagram (all charts)
- Appendix I - Sample - Contractor Generated FAA Pack List/Mailing Labels/Invoice
- Appendix J - Sample - Contractor Generated NGA Mailing Labels
- Appendix K - TI/1FA/C01: Technical Instructions For Packaging and Distribution of DoD Flight Information Publications, Books, Charts, and Related Publications, First Edition, May 2005
- Appendix L - Sample - Invoice Authorization for Payment
- Appendix M – Four Color Enroute Charts Negative Record

4.0. GOVERNMENT FURNISHED PROPERTY - The Government will provide the following Government owned property to the Contractor for use in the performance of this contract:

4.1. Before and/or at the commencement of the initial printing cycle, the Government will furnish:

- A. A complete set of pre-punched composite negatives for each chart. The composite negatives will be

identified by:

- Chart series number (odd numbers are for the face side and even numbers are for the back side).
- Negative number (which identifies chart feature).
- Color identification (blue, brown, black or green).

B. Negatives will be shipped to the contractor in containers that are flat film boxes (approximate size: 22" x 55" & 22" x 60").

C. One pin bar representative of the punch registration system used by the Government.

4.2. On subsequent printing cycles the Government will only furnish:

A. Pre-punched composite negatives which will be new each printing cycle.

B. Shipping containers will be replaced at no charge, only if their replacement was due to normal wear and tear, as determined by the COTR, Alternate COTR, or Government representative. The Government will require 40 calendar days to replace any shipping container.

4.3. For each printing cycle the Government will furnish:

A. ASCII data files via FTP and the Internet containing all information necessary to fulfill civilian customer orders including a Customer Information File and a Product Information File (see Appendix A).

B. The FAA/NACG will be responsible for providing the ASCII data files for civilian customers. NGA will be responsible for providing data files for military customers (see Appendix B).

C. Print order stating the specific quantities required for each chart and the specific quantities required for each major collation (see Appendix C).

D. A material transfer list signed by the designated Government Representative and a Contractor Representative as specified in Appendix M, "Four Color Enroute Charts Negative Record".

E. Call Order authorizing work to be performed (see Appendix D).

4.4. On request to the COTR, the Government will furnish wet or dry ink samples.

4.5. Upon receipt and inspection of the GFP, the Contractor shall sign and date a materials transfer/negative check-off list indicating acceptance (see Appendix M).

4.6. Use of, maintenance of, liability for, and title to GFP and property acquired by the Contractor for the Government shall be as set forth in the "Government Property" clause of the contract. Upon receipt of the GFP, the Contractor shall carefully perform an inspection to determine whether material is acceptable. Any discrepancies shall immediately be brought to the attention of the COTR or Government Representative. Examples of such discrepancies are as follows:

A. The negatives and/or customer and product data files, etc., were not ready on the date specified in the schedule.

B. Missing negatives.

C. Negative quality is not suitable for reproduction. The Contractor shall not be responsible for informational content of the negatives. However, the Contractor shall be responsible for negatives that are damaged beyond repair (beyond normal wear and tear), lost or destroyed after receipt by the Contractor. Depending on the type/location of the damage, all negatives may have to be reimaged. Upon receipt of GFP, the Contractor shall

carefully perform an inspection to determine whether the material and data files are acceptable. Any discrepancies shall immediately be brought to the attention of the Contracting Officer's Technical Representative (COTR). After inspection, the Contractor shall sign and date the "Four Color Enroute Charts Negative Record" (Appendix "M") indicating acceptance. The estimated cost of replacing/remaking each negative is approximately \$110 per negative, subject to variations in film prices.

4.7. The Contractor shall return all GFP in the same format and conditions initially furnished. The Contractor may propose to the Contracting Officer an alternate system of production that would involve changing the GFP. Any changes to the methodology or GFP will be negotiated and incorporated into the contract by modification.

4.8. The Contractor shall return all shipments of GFP, upon completion of the use of such GFP, within ten (10) calendar days at the Contractor's expense.

4.9. The Government may, at its discretion, recall any GFP in a manner so as not to unduly delay performance of the contract. In such a circumstance, the Contractor shall return all GFP requested within two (2) calendar days after request by the COTR or Alternate COTR. In cases of emergency, the COTR or Alternate COTR may request the GFP's return sooner than two (2) days. The Contractor shall return the GFP in accordance with shipping instructions from the COTR or Alternate COTR. Shipment shall be at the Government's expense except when the recalled material may be included in a routine shipment without delaying previously established schedules

5.0. DESCRIPTION OF SERVICES - The Government will provide charts and applicable GFP to the Contractor for performance of services identified below. The Government will assume full responsibility for the contents of the charts and for the condition of the GFP at the time it is transferred to the Contractor. The Contractor shall assume responsibility for all of the services described in the call order. These services include:

5.1. Lithographic Services

A. Negative corrections - The Government may require the Contractor to perform negative correction work to the composite negatives.

B. Compositing - The Contractor shall allow no more than 2-3% in dot gain.

C. Platemaking - The Contractor shall produce functionally satisfactory printing plates for use in the printing process.

D. Printing - The Contractor shall perform all printing operations in the production of and maintain product quality of all charts in accordance with the technical specifications. The Contractor shall use the lithographic offset printing process in the reproduction of the Enroute Charts.

1. General - Charts shall be printed face and back, head to head except EHUS 3/4, 5/6, 9/10, and 11/12, ELUS 19/20, 21/22, 25/26, 27/28, 29/30, 35/36 which prints head to foot.

2. Image placement on the sheet of paper shall be in accordance with the chart neckline. Back-up image placement on the sheet of paper shall be accomplished when the top and bottom neatlines and the left and right trim marks match one another.

3. Registration of color negatives will be to the Black (or any colors as determined by the Government) neckline by chart. Each negative will have corner marks to match the neckline which shall be used as registration marks. These marks are to be left on during the entire reproduction cycle and shall be used as basis for printing registration.

4. Color bars for each color shall be printed on each chart outside the chart's trim on the trailing edge of the sheet of paper. Color bars shall be a minimum (top to bottom) width of .635 cm (1/4 inch). Color Bars shall be printed as squares, rectangles, or circles. Color bars shall be printed in solid inks or as various screen percentage images. Color bars shall be evenly spaced across each sheet of paper. Colors shall be alternated across the sheet. Colors shall be repeated at least as frequently as every 7.62 cm (3 inches). For charts printed face and back, the color bars shall be printed on the face side at the trailing edge of the sheet of paper and on the back side at the

trailing edge of the sheet of paper.

5. No Contractor credit note shall appear anywhere on the finished products.

6. Printing Inks as defined in the specifications shall be used in the printing of these charts. The specification standard for color match is set forth in 7.12.A. The specification standard for light fastness is set forth in 7.12.B. All charts (EHAK, EHUS, ELAK, ELUS, and Area) shall be printed in four (4) colors using:

NOS Blue - No. 310 (PMS Reflex Blue)

NOS Brown - No. 510 (PMS 498)

NOS Black - No. 001 (PMS Black)

NOS Green - No. 225 (PMS 354)

NOTE: (PMS colors/color numbers furnished for purposes of color matching only. The Government believes that PMS inks do not satisfy the light fastness requirement indicated in 7.12.B.).

E. Paper - All paper used in the production of the Enroute Charts shall be in accordance with the "Government Paper Specification Standard" published by the Joint Committee on Printing (JCP), Congress of the United States and as specified in Appendices E and F, respectively.

1. JCP paper specifications are revised from time to time. In the event that the specifications change during the duration of the contract, the Government will allow the Contractor to substitute comparable paper of equal quality after samples are inspected and specifications are approved by the COTR. Paper specifications, in abbreviated form, are listed below:

a. JCP E-40 white chemical wood map lithographic paper, basis weight 22 lb.

b. JCP G-50 white translucent bond (no less than 25% cotton fiber) paper, basis weight 16 lb.

F. Negative control - The Contractor shall be liable for the safe-keeping of all composite negatives in the Contractor's charge. Each negative shall be packed by chart number (each side packed separately) using a slip sheet between the charts, and placed flat in the shipping container.

1. Picking-up every 56 days - On the "Negative Available For Pick-Up" dates (see Performance Schedule 8.0.) the Contractor shall be responsible for pick up of those Government-furnished lithographic composite negatives.

2. Returning Negatives every 56 days - Within five (5) calendar days after each chart effective date, the Contractor shall return all composite negatives. The Contractor shall transport those negatives to the Government representative specified by the COTR, at 10201 Good Luck Road, Glenn Dale MD. 20769-9700 between 11:00 a.m. and 2:00 p.m. When the date to return the GFP falls on a federal holiday, delivery shall be made on the next federal workday following the holiday.

3. The Contractor is responsible for any maintenance (retouching when necessary) required on composite negatives.

4. Return Negatives at the end of the contract - Within twelve (12) calendar days after the last effective date of this contract, the Contractor shall return all composite negatives.

5.2. Finishing Services (see Appendix H)

A. Trimming - The Contractor shall trim all charts to one of the finished sizes listed below without cutting off any printed image except the color bar and where the image is supposed to bleed off the chart.

1. 20 in x 60 in charts - ELUS 5/6, ELUS 9/10, ELUS 11/12, ELUS 13/14, ELUS 15/16, ELUS 17/18, ELUS 19/20, ELUS 21/22, ELUS 23/24, ELUS 27/28, ELUS 31/32, ELUS 33/34, ELUS 35/36.

2. 20 in x 55 in charts –EHUS 1/2, EHUS 3/4, EHUS 5/6, EHUS 7/8, EHUS 9/10, EHUS 11/12, ELUS 1/2, ELUS 3/4, ELUS 7/8, ELUS 25/26, ELUS 29/30, EHAK 1/2, ELAK 1/2, and ELAK 3/4.

3. 20 in x 50 in charts - Area 1/2

B. Folding - The Contractor shall uniformly fold all charts, except those designated on the print order as flat, using accordion type folds of 5 inches each (as specified below), and then one right angle fold, with the title panel of the odd numbered side on the outside, to form the finished folded chart size of 5 inches x 10 inches (see Appendix H). Folding machine calibrations should be set as loose as possible while maintaining the flatness necessary for mailing. Folding requirements are listed below:

1. Charts that are 20 inches x 60 inches shall require eleven (11) folds to form twelve (12) 5-inch panels.
2. Charts that are 20 inches x 55 inches shall require ten (10) folds to form eleven (11) 5-inch panels.
3. Charts that are 20 inches x 50 inches shall require nine (9) folds to form ten (10) 5-inch panels.

C. Collating - The Contractor shall collate the charts according to the instructions provided on each shipping label. The Contractor shall collate the ELUS Charts into sets in accordance with the instructions on each shipping label. The Contractor shall collate all three categories of the ELUS Chart sets and/or any combination of other charts, so that the final fold of each chart is at the same end and all charts are facing in numerical order with the index tabs face up. To ensure that each set arrives at the address of the consignee intact, the Contractor shall band the three categories of each ELUS set by the use of rubber bands or plastic bands or plastic wrap of sufficient strength. The Contractor shall have the option of banding or not banding any of the other collations. There are three (3) categories of these major collations:

1. Full set - Area and ELUS 1/2 through ELUS 35/36 (19 charts)
2. East set - Area, ELUS 15/16, ELUS 17/18, and L21/22 through ELUS 35/36 (11 charts)
3. West set - Area and ELUS 1/2 through ELUS 19/20 (11 charts)

5.3. Distribution Services

5.3.1. For NACG orders: The Government shall place data files containing FAA/NACG Customer Information and Product Information on its FTP server by no later than noon Thursday, 21 days prior to the effective date (see 8.0 Performance Schedule). Upon notification, via e-mail from the Government, the Contractor shall retrieve these files via the Internet using FTP. If the FTP site is not accessible, the Government shall place the data files on a CD-ROM and deliver them to the contractor via overnight delivery service. The contractor will verify counts from EDI data with NACG prior to printing invoices and packing slips. From the data contained in these files (see Appendix A) the Contractor shall format and print order invoices/pack lists, shipping labels, and mail manifests. Print formats shall be approved by the Government.

A. Order Invoices/Pack Lists (see Appendix I) - The Contractor shall format and print order invoices and pack lists. The Government will specify the format for the order invoices. The Contractor format is acceptable for the pack list. The Contractor shall insert an order invoice in the first package of each order.

B. Shipping labels (see Appendix I) - The Contractor shall format and print shipping labels for all FAA/NACG customer orders. The format for the shipping labels shall be recommended by the Contractor but must be approved by the Government. All items printed by the Contractor shall be produced from laser or equivalent quality printers. The Government will specify print formats for all Contractor-printed materials other than shipping labels. The Contractor's proposed label format shall be submitted to the Government for approval prior to

performance of the contract. New ADS requirement, address lines need to be at least 40 characters in length and require three address lines.

C. Bar Code Labels - The Contractor shall be required to apply or print a shippers bar code label with a tracking number (which shall be traceable to the order number) on each package. The Contractor shall fill orders so as to minimize the number of packages shipped to a customer and not exceed the maximum package weights or dimensions established in the contract, as well as being consistent with other packaging specifications. The Contractor shall be responsible for obtaining carrier approval for the use of shipping labels and bar codes.

5.3.2. For NGA customer orders, NGA will place data files containing NGA customer and product information on its FTP server by no later than 28-days prior to the effective date (see 8.0 Performance Schedule). The Contractor shall retrieve these files via the Internet using FTP. The Contractor shall convert the NGA EDI data files from the NGA format (see Appendix B) to the FAA/NACG format (see Appendix A). From this data, the Contractor shall format and print pack lists, shipping labels, (see Appendix J) and mail manifests. Print formats, other than shipping labels, shall be approved by the Government. (NOTE: FAA/NACG and NGA may use different acronyms to identify the same product. The Government will provide a cross-reference between FAA/NACG and NGA nomenclature at the time of award).

A. The contractor shall determine the shipping mode of all NGA packages. NGA requires that all deliveries be at their destination 3-days prior to the effective date. All postage shall be charged to the appropriate NGA established postage/carrier accounts. The Contractor shall package all shipments that require a NGA label in strict accordance with Appendix K.

B. The Contractor shall send a confirmation file to NGA no later than Thursday, 7 (seven) days prior to the effective date. The confirmation file should include the following information: customer number, tracking number, if sent by traceable means, and the weight of each package. There will be one record for each package sent.

5.3.3. Mail Manifests - The Contractor must use a USPS approved scaled mail manifest system. The Contractor shall generate shipping and package tracking manifests for packages shipped by any carrier that provides shipping services for the Government. The mail manifest will be calculated from Government supplied data files, weight of packages determined by the Contractor, and Government tendered rate information maintained by the Contractor.

A. The Contractor shall complete, sign, and return to the USPS a "Mail Manifest System Application". Upon receipt of the "Mail Manifest System Agreement", the Contractor shall complete, sign, and return it to the USPS.

B. The Contractor shall deliver the UPS manifest with the final UPS delivery to the UPS representative in accordance with UPS rules and regulations. In the rare event that the Contractor needs to create a new label, the unique package identification number, weight, and postage must be added to the manifest proper and to the summary at the end of the manifest. At the end of each printing/delivery cycle, the Contractor shall forward a copy of the UPS signed delivery form to the address below. UPS will invoice the postage costs to the Government based on the manifest.

FAA/NACG Distribution Division,
Attn: Traffic Manager, AJW-355
10201 Good Luck Road
Glenn Dale, MD 20769-9700

C. The Contractor shall deliver the USPS manifest with the final USPS delivery to the USPS representative in accordance with USPS rules and regulations. In the rare event that the Contractor needs to create a new label, the unique package identification number, weight, and postage must be added to the manifest proper and the summary at the end of the manifest. USPS will invoice the postage costs to the Government based on the manifest.

D. The Contractor shall deliver separate USPS manifests, one for FAA/NACG packages and one for NGA packages, with the final USPS delivery to the USPS representative in accordance with USPS rules and regulations. USPS will invoice the postage costs separately to the FAA/NACG and NGA accounts based on the manifest. USPS

regulations require the Contractor to perform quality control sample checks for different categories of mail. The Contractor shall perform the necessary sampling checks, shall note those weights and postage amounts that differ from the manifest, and identify the reason for the discrepancy. The Contractor shall correct the discrepancy if it is determined to be Contractor error. The contractor shall forward a copy of the USPS quality control forms for the FAA and NGA shipments to the FAA/NACG Distribution Division, Traffic Manager, AJW-355 at the end of each printing/delivery cycle.

E. For FedEx shipments, the contractor shall use the FedEx Power Ship System. The contractor shall deliver the FedEx Power Ship System manifest with the final FedEx delivery to the FedEx representative, in accordance with FedEx rules and regulations. In the rare event that the contractor needs to create a new Airbill, a unique package identification number, weight, and postage must be added to the manifest proper and to the summary at the end of the manifest. The contractor shall forward a copy of the FedEx Power Ship System manifest to the FAA/NACG Distribution Division, Traffic Manager, AJW-355 at the end of each printing/delivery cycle. FedEx will invoice the postage costs separately to the FAA/NACG and NGA accounts based on the manifests.

5.3.4. Contractor Transmissions to the Government - The Contractor shall confirm receipt, via e-mail on the same day, of the customer, order, and product information files. This confirmation shall include the file name, total number of customers, the total product line item count and total product quantity for both Standing Orders and Subscriptions, and the total number of orders by each shipping mode.

A. The Contractor shall be required to transmit an ASCII data file (format specified by the Government, (see Appendix A) to the Government no later than Thursday, 7 (seven) days prior to the effective date. The Contractor shall immediately e-mail the Distribution Division that the confirmation file is available on the FTP site. This data shall confirm that each order has been fulfilled and that shipping has been completed. For each order reported as shipped, the Contractor shall transmit the order number, carrier, package weight, postage, dimensions, package shipping date, and the package tracking number, if applicable. The Contractor shall also transmit the order number, GBL number, and date of shipment for all GBL shipments; and shall provide the order number and date of pick-up or delivery for all other shipments picked up at their loading dock, or that were delivered by the Contractor.

B. The Contractor shall provide an electronic version of each shipping manifest to the Government via FTP. The Government shall approve the shipping manifest format.

5.3.5. Carriers and Delivery Modes: Carriers and delivery modes by which orders are to be shipped shall be identified by codes contained in the data transmitted to the Contractor. These codes will be provided to the Contractor following contract award. The following are shippers currently used by the Government, but this list is subject to change at the discretion of the Government:

USPS - First Class, Priority Mail, Air Mail and Parcel Post.

UPS - Ground Service

FedEx – Priority Overnight, FedEx International Package Service and FedEx Ground

Advance Post Company - International Priority Air Mail

Commercial Carriers - International air freight shipments made by Commercial Bill of Lading (GBL), or by commercial invoice.

5.3.6. Other Invoice/Shipping requirements: The Contractor may be required to prepare documentation for international or other shipments including but not limited to:

- Commercial invoices
- North American Free Trade Agreement
- Air-bills

- Certificates of Origin
- Shippers Security Endorsement

5.3.7. Distribution/Shipping - The Contractor shall complete all product distribution by 5:00 pm on the date specified as the Distribution Date (see 8.0. Performance Schedule) of the specifications. Distribution shall be considered as complete when released to the carrier or, for mail shipments, delivered to a post office. The Contractor shall ensure that shipments are released to the carrier by the required hour and date and that all carriers' vehicles have left the premises.

A. The Contractor shall meet the following mailing rules and regulations:

1. For USPS mailings, the United States Postal Service regulations as specified in the Domestic Mail Manual and the International Mail Manual;
2. For all UPS mailings, pamphlet titled "How to Use UPS";
3. For all FedEx mailings, and
4. For all packages shipped to NGA customers, the Contractor shall strictly abide by Appendix K, the NGA "Technical Instruction for Packaging and Distribution of DoD Flight Information Publications, Books, Charts, and Related Publications," dated May 2005. Service Manuals of other carriers used in the performance of this contract.

B. Shipments shall be limited to one package per address label. Each carton must be marked (1 of ____), (2 of ____), etc., to indicate the total number of cartons in the shipment. **The FAA/NACG order invoice or the NGA packing slip shall be placed in carton No. 1.**

5.3.8. Shipping and Postage Charges - The Government shall prepare and provide the Contractor with GBL's or other shipping documents authorizing commercial carrier ground or air freight shipments. Completed GBL's or other shipping documents will be forwarded to the Contractor who shall then arrange to have the shipment picked up by the designated carrier. **The yellow - Memorandum Copy - of the GBL or a copy of the other shipping document(s) shall be returned to the FAA/NACG Distribution Division, Traffic Manager, AJW-355, within two (2) days after the Distribution Date.**

A. The Contractor shall provide, install, and maintain a USPS approved package mailing system capable of producing uniform periodic reports of orders and all packages that have been tendered to a carrier. Reports shall include carrier name, order number, date of shipments, package weights, package tracking numbers, and shipping costs for each package. A separate report shall be required for each carrier; reports shall be sorted in ascending order by order number.

1. If a carrier requires a Contractor use a vendor-supplied system, the Contractor shall be responsible for acquiring and installing the appropriate hardware/software required, for example, the Power Ship System, in the case of packages tendered to FedEx.

2. The Contractor shall be required to update mailing system programs or data to reflect carrier rates, zones, zip codes, etc., whenever changes are announced or carriers are added. The Government currently receives discounted rates from several carriers that are subject to change. The Government shall provide to the Contractor the rates in effect following contract award and, thereafter, as changes are received.

5.3.9. Packaging - The Contractor shall package all individual charts or sets of charts or bulk shipment of charts exactly as instructed by the type and quantity printed on each pack list or print order.

A. Four weeks after contract award, the Contractor shall submit to the Government the following information for each package: length, width, height, weight (empty), maximum weight for each package, and maximum number of items to be packed in each. Upon Government approval, this will become the standard for packaging. NO CHANGES from this standard will be permitted without prior approval of the COTR.

B. The Contractor shall use packaging and filler of sufficient strength so as to ensure that the consignee's chart order arrives intact and undamaged. In addition, plastic strapping shall be used on all boxes, where appropriate.

5.3.10 Labeling and Marking - The Contractor shall be required to neatly label and mark packages and shipments and provide, prepare, and affix labels, stickers, or forms, for all packages and shipments. Pressure sensitive, self-adhering labels shall be utilized where available.

A. Shipping labels shall be firmly affixed to the widest surface of all packages. No part of the shipping label shall be placed over a seam or on top of sealing tape and no part may obstruct or be obstructed by other labels, stickers, markings, or banding.

B. When there are multiple packages in an order, the invoice shall be placed in the first package and it shall have the words "Invoice Enclosed" on either the label or stamped on the label-side of the package.

C. USPS stickers (i.e., Priority Mail, Par Avion, etc.) must be applied to all USPS shipments. Stickers shall be placed directly above and to the center of the shipping label to designate USPS delivery service and to ensure proper handling by the USPS. In lieu of the stickers, priority packages must be identified by incorporating the word "Priority" on the label or on the package.

D. All shipping envelopes, bags, and cartons shall be preprinted or labeled with the message:

**U.S. GOVERNMENT
CHARTS/PUBLICATIONS
CRITICAL TO NAVIGATION
SAFETY DO NOT DELAY**

This message shall be 15 point Bold Caps, surrounded with a 1/16 inch solid border, and printed in black ink. Placement shall be in the upper left portion of the address side of shipping envelopes and bags, and in the upper top and sides of rectangular cartons.

5.3.11. Special copies - Three types of special copies of printed charts, not identified by mailing labels, shall be placed into the distribution system in accordance with the following requirements:

A. Priority advance verification copies - These press proofs, for Government review, shall be good quality press sheets, printed on one side only, untrimmed, and unfolded with the color bar or ball intact.

1. Eight (8) copies of each chart shall be delivered to two (2) addresses in the Washington DC area -six [6] shall be sent to the Enroute Navigation Branch, 1305 East West Highway, Silver Spring, MD 20910-3281 and two [2] shall be sent to the Reproduction Division, 10201 Good Luck Road, Glenn Dale, MD 20769-9700 as specified by the COTR.

2. The copies shall be hand delivered. Priority advance verification copies shall be delivered daily, as they come off of the press, until all charts are printed. All charts printed prior to 2:00 p.m. must be delivered that day in time for the next weekday delivery. Any chart printed after 2:00 p.m. may be held and delivered the next day.

3. For shipping purposes, priority advance verification copies shall be rolled and placed in tubes. The Government will reimburse the Contractor for overnight delivery at the rates quoted in the pricing schedule. These copies SHALL NOT be considered part of the ordered quantity as stated in the print order.

B. Advance copies - These copies are printed, trimmed and folded charts (printed on both sides). The Contractor shall ship, by overnight courier service or hand delivery, two (2) copies of each chart to the Government representative in the Enroute Navigation Team and two (2) copies to the Government representative at the Reproduction Division. Advance copies must be among the first copies out of the finishing operation and must be mailed within four (4) hours of folding. Advance copies shall be considered part of the ordered quantity identified in the print order shelf stock.

C. Shelf stock copies - These copies, identified in the print order, may be flat (printed both sides) or folded. The shelf stock copies must be received by the Government's distribution Contractor by 2:00 p.m. on the distribution date; however, delivery of shelf stock must not interfere with the distribution to regular customers. The distribution Contractor, located at 10201 Good Luck Road, Glenn Dale, Maryland accepts deliveries Monday through Friday, 7:00 a.m. to 3:00 p.m. (If a change in the Government's distribution Contractor results in added transportation costs to the Contractor, the Contractor may request an equitable adjustment in the contract price).

1. Shelf stock shipments shall be placed in cartons and secured to skids or pallets. No more than one chart number should be put in a carton. Each carton is to be marked as to publication, date of edition and number of copies. The Contractor shall mark each carton as "1 of _____," "2 of _____," etc., to indicate the total number of cartons in the shipment. The small quantity of each chart that does not completely fill a carton shall be packed separately in its own container.

2. The Contractor shall generate a delivery document, for the shelf stock shipments, identifying the number of boxes for each chart without identifying the quantity of charts in the boxes, and shall deliver the document to the Government's distribution Contractor along with the bulk shipment of shelf stock.

D. In case of shortages - If a quantity shortage is apparent to the Contractor at the time of distribution because the shipping quantities called for on the pack list exceeds the print order quantities, the Contractor shall notify the COTR with the following information and obtain a determination on how to proceed:

1. Type and quantity of chart in short supply and/or
2. Name and addresses of consignee(s) not being filled.

E. For replacement charts ordered to correct Government errors or to fill emergency needs, the Government will reimburse the Contractor at the rates stated in the contract. All associated shipping costs shall be charged to the Government.

F. The Contractor shall bear the cost of replacement charts, packing, and shipping to correct Contractor errors.

G. The Contractor shall replace shortages due to Contractor error from the Contractor's site.

5.3.12. Late Distribution : The Contractor shall immediately notify the COTR when the Contractor anticipates difficulty in complying with the contract delivery schedule or date, or when the Contractor has knowledge that any actual or potential situation may delay or threaten to delay the timely performance of the Contract. The Contractor shall then send a written follow-up to the CO and the COTR, stating what products and quantities will be/are late, the number and location of the consignees involved, and when the material will be ready for shipment. Nothing contained herein shall be construed as a waiver by the Government of any delivery schedule or date or of any rights or remedies provided by law or under this Contract.

NOTE: No charts (except for priority advance verification copies and advance copies) shall be mailed until all priority advance verification copies have been reviewed by the COTR or his designated Government representative, and that representative has given verbal authorization to mail. However, notwithstanding the above, under no circumstances shall the charts be held beyond the mailing deadline.

5.3.13. Return Shipments and Correspondence - Under UPS regulations, the Contractor's name shall appear

on the return address of the labels. Thus the Contractor shall be required to accept undelivered, returned packages. The Contractor shall handle returned shipments and correspondence or other material intended for the Government as follows:

A. FAA/NACG returned shipments. All returned packages must be reported to FAA/NACG, Distribution Division, Public Sales and Services Group (301) 344-6329 as soon as possible. The Contractor shall provide FAA/NACG with the customer account number and the reason for the return. FAA/NACG will attempt to contact the customer to verify the address and to see if the package can be re-shipped.

- Re-ships. FAA/NACG will fax a re-shipment request to the Contractor by 3:30 pm for shipments due out that day. All re-shipments shall be sent out via overnight carrier (FedEx).
- Re-ship responsibility. Procedures for determining which party is responsible for the cost of the re-ship are as follows:
 1. The order has been miss-packed, contains the wrong product, or has an incomplete order; the Contractor is responsible and the Contractor shall use their overnight delivery account to re-ship the package.
 2. The address provided by FAA/NACG is incorrect or incomplete; FAA/NACG is responsible and will send out a replacement order. The Contractor shall remove the invoice or packing list, if any, the shipping label, and the carrier's explanation for return and fax them to the FAA/NACG Distribution Division, Public Sales and Services Group (301) 344-6329. Contents of the returned shipments shall normally be destroyed by the Contractor. From time to time, the Contractor may be required to deliver returned shipments to the Distribution Division intact.
 3. The package was shipped by the distribution date, but was not received by the effective date; FAA/NACG is responsible and the FAA/NACG distribution contractor will send out a replacement order via overnight delivery service.

B. Correspondence or other material erroneously mailed to the Contractor's facility but intended for the FAA/NACG Distribution Division such as items returned by sales agents for credit, shall be delivered to the FAA/NACG Distribution Division within five (5) days following receipt by the Contractor.

C. NGA return shipments. All returned packages must be reported to NGA as soon as possible. The Contractor shall provide NGA with the customer account number and reason for the return. NGA will attempt to contact the customer to see if the package can be re-shipped.

- NGA re-ships. Re-shipments are made to customers that have not received their order by the effective date. NGA will fax a re-shipment request to the Contractor by 3:30 pm for shipments due out that day. All re-shipments shall be sent out via overnight carrier (FedEx).
- NGA re-ship responsibility. Determining which party is responsible for the cost of the re-ship is handled as follows:
 1. The order has been miss-packed, contains the wrong product, or has an incomplete order; the Contractor is responsible, use the Contractor's overnight delivery account.
 2. The address provided by NGA is incorrect or incomplete; NGA is responsible, use NGA's overnight delivery account.
 3. The package was shipped by the distribution date, but has not been received by the customer; the Contractor is responsible and will send out a replacement order via overnight delivery service.

D. The return address for all NGA packages shipped to NGA customers is: DDRV-N, 8000 Jefferson Davis Highway, Warehouse 66, Bay D, Richmond, Virginia 23297-5900. The only exception is for those packages shipped by UPS. All UPS packages must have the distribution contractor's address as the return address (see 5.3.13.A.).

6.0 DESCRIPTION OF DELIVERABLES

6.1. Using Lithographic offset printing, the Contractor shall produce the following United States Government aeronautical charts. The following identifies the medium on which they are to be printed:

A. On E-40 22 lb white chemical wood map lithographic paper (see Appendix F):

1. Area Chart - U.S.: 1 chart; A1/A2.

2. Enroute Low Altitude - U.S. chart series: 18 charts; ELUS 1/2, ELUS 3/4, ELUS 5/6, ELUS 7/8, ELUS 9/10, ELUS 11/12, ELUS 13/14, ELUS 15/16, ELUS 17/18, ELUS 19/20, ELUS 21/22, ELUS 23/24, ELUS 25/26, ELUS 27/28, ELUS 29/30, ELUS 31/32, ELUS 33/34, and ELUS 35/36.

3. Enroute High Altitude - U.S. chart series: 6 charts; EHUS 1/2, EHUS 3/4, EHUS 5/6, EHUS 7/8, EHUS 9/10, EHUS 11/12.

4. Enroute Low Altitude - Alaska chart series: 2 charts; ELAK 1/2 and ELAK 3/4.

5. Enroute High Altitude - Alaska chart: 1 chart; EHAK 1/2.

B. On G-50 16 lb white translucent bond (at least 25% cotton fiber) paper (see Appendix F) printed on face only subject to minor changes. Transluents required each cycle will be listed in the Print Orders Report and included with the Call Order documents (see Appendix D).

C. Product sizes - Each chart shall be in one of these two sizes:

1. 20 inches x 60 inches

2. 20 inches x 50 inches

3. 20 inches x 55 inches

D. Printed in four (4) colors, on one (1) or two (2) sides of the paper, folded to 5 inches x 10 inches using accordion-type folds with one (1) or two (2) right angle folds. Charts printed on G-50 are not folded.

6.2. Printing and distribution quantities: The Contractor shall furnish to the Government all the products set forth in this contract that are called for by Call Orders (see Appendix D). Specific quantities of each chart per production cycle will be identified in print orders (see Appendix C) in accordance with the provisions herein.

A. Precise quantities for any chart cannot be accurately predicted prior to the issuance of the print order. The Government DOES NOT guarantee any minimum or maximum quantities for any individual chart under the contract. However, the guaranteed minimum quantity for each contract period (i.e., base period; option period) shall be no less than 2,800,000 charts and the maximum quantity for each contract period shall not exceed 16,000,000 charts.

B. The quantities of each chart are estimates only and are not purchased hereby. In the event the Government's requirements for supplies/services do not result in the quantities specified in Appendix G, such an event shall not constitute the basis for an equitable price adjustment under this contract.

C. The Contractor shall be required TO RETAIN printing overruns for four (4) weeks after the delivery date associated with the printing. The Government reserves the option to purchase from the Contractor, during this four (4) week period, any or all of the overrun charts at the applicable rates stated in the pricing schedule. All

remaining printing overruns must be destroyed (rendered unusable) no later than the next negative pick up date.

6.3 Call Orders shall be completed within the time frame specified in the Call Order, and the rights and obligations of the Contractor and the Government regarding those orders shall be governed by the terms of the contract.

6.4. *The Government reserves the option to phase in additional products and/or phase-out products listed in this contract. In either case, the Government will provide 30-day notice to the Contractor when any change occurs.*

7.0. QUALITY CONTROL/QUALITY ASSURANCE

ATTENTION: CONTRACTOR IS CAUTIONED: THE ACCURACY OF THE INFORMATION ON THESE CHARTS IS OF PARAMOUNT IMPORTANCE. ERRORS INCORPORATED ONTO THE CHARTS COULD JEOPARDIZE THE SAFETY NOT ONLY OF AIRCRAFT, BUT COULD BE THE PRIMARY FACTOR IN LOSS OF LIFE OR PROPERTY, AND COULD ALSO JEOPARDIZE THE NATION'S MILITARY READINESS AND SAFETY. TO ACHIEVE MAXIMUM ACCURACY IN THE CHARTS, THE CONTRACTOR'S QUALITY CONTROL PROGRAM MUST BE ORGANIZED TOWARD THE OBJECTIVE OF REACHING A GOAL OF ZERO DEFECTS IN EACH AND EVERY PRODUCT.

7.1. The Contractor shall be responsible for the control of product quality and adherence to production standards during all phases of work identified in 5.0. Description of Services. FAA/NACG has provided quality standards, based on a system of "defects" for all work phases identified under 5.0. Description of Services. The quality standards are provided to prevent defects from occurring by conducting in-process inspections, self evaluation, and corrective action, when appropriate, before extensive correction or rework is required.

7.2. The Government is responsible for the cartographic content of the charts and the condition of the GFP at the time of transfer to the Contractor. Acceptance of the supplies/services is solely the responsibility of the government.

7.3. All deviations of the final deliverable products (specifications, standards, or process) whether classified herein or not, must be called to the attention of the COTR, immediately upon their discovery. Specific quality standards begin with 7.4.

7.4. Quality Standards: Any imperfection, deficiency, flaw, lack of completeness, or other undesirable condition is considered a variance from the specifications or standards. The Contractor is required to deliver products and services free from defect. Reasonable tolerance ranges have been established for all production phases and are provided herein. Products outside of these tolerances result in defects that are classified into three groups as follows:

- A. Critical - A critical defect (No. 6) is one that either
 - judgment and experience indicate could result in hazardous or unsafe conditions for individuals
 - using the products, or could prevent performance of a navigational function
 - or is a serious departure from specifications, established standards, or average process capability.
- B. Major - A major defect (No. 3) is a defect, other than critical, that either
 - could materially reduce the usability of the unit of product for its intended purpose, or
 - is a significant deviation from specifications, established standards or average process capability, or
 - materially affects the appearance of the charts.
- C. Minor - A minor defect (No. 1) is one that either does not
 - materially reduce the usability of the product for its intended purpose, or
 - is a departure from established standards or specifications having no significant bearing on the intended use, or

- affects the appearance only to a minor degree.

7.5. Disposition - When a departure from specified contract requirements exceeds the tolerance limits in workmanship, the service is defective and the terms of this contract have been violated. As soon as the Contractor recognizes a defect in the final product, whether identified specifically herein or not, the Contractor shall immediately notify the COTR or Alternate COTR. No remedies contained herein shall preclude the Government from any and all other remedies available to the Government by law or under the terms of this contract. Disposition, whether defect is recognized by the Contractor, the Government, or customer complaints, shall be as follows for each defect category:

A. If a critical defect is discovered before the distribution deadline, the Contractor must immediately notify the COTR or Alternate COTR. Charts with known No. 6 defects must never be distributed unless this action has been directed by the COTR. The Contractor, if at fault and if necessary to meet the effective date deadline, will bear the additional postage costs to ship the charts by a faster mode of transportation.

B. If a critical defect is discovered after the distribution deadline, the Contractor must immediately notify the COTR or Alternate COTR. The Contractor, if at fault, will bear the additional costs of curing each No. 6 defect, including the additional postage costs required to ship the charts by a faster mode of transportation to meet the effective date deadline and, if required, the cost of printing and distributing a Special Notice (which alerts chart users to the defect).

C. If a major defect is discovered at any time, the Contractor must immediately notify the COTR or Alternate COTR, who will determine if the chart needs to be reprinted. If it does, 7.5.A., will apply.

D. If a minor defect is discovered, the Contractor shall notify the COTR or Alternate COTR on the next working day, but may proceed with the distribution, unless otherwise notified by the COTR or Alternate COTR.

E. If a defect is discovered which has not been classified in this document, the Contractor must immediately notify the COTR who will assign a classification based on the severity of the defect. The COTR will then determine the proper disposition.

7.6 Contractor Surveillance - The Contractor shall have in place its own quality control plan covering the charts, GFP, raw materials, and equipment. The quality control plan shall describe the plan of action for the 100 percent inspection stations and sampling techniques and plan of action for the Sample Inspection stations. The Contractor shall comply with its own quality control plan during contract performance. The COTR will periodically verify the system to see if the Contractor is complying with the quality control plan. The Contractor's quality program can be disapproved whenever the system's procedures do not accomplish their objectives.

A. The Contractor's quality control system used in the printing, finishing and distribution phases of the contract must ensure that:

- The charts are produced from quality raw materials (paper and ink)
- The charts are in conformance with all specified requirements of the contract
- The charts are distributed to the correct recipient in exact quantities by the date specified by the Government.

B. 100 Percent Inspection - The Contractor shall establish and maintain a system of inspection at key points in the printing, finishing, and distribution processes. The list of inspection stations shown are key points in the inspection system. They must be installed and maintained as an integral part of the production process. Items processed in the following phases of production require complete or 100 percent inspection:

- Negative corrections/contact photography (if applicable)
- Platemaking
- Pick up and examination of GFP negatives

C. Sample Inspection - The quality level of production lots in the printing, trimming, folding, and collating processes will be determined by use of sampling procedures. All samples shall be inspected for compliance with specification standards.

D. Sample Selection - Samples must be selected at random to reflect the quality of the production. The following program may be used as a basis for the Contractor's sampling program:

<u>STATION:</u>	<u>PRIMARY QUALITY CHARACTERISTICS:</u>
Printing.....	proper compositing, registration, and litho quality
Raw Materials.....	equal to specifications
Trimming.....	size and appearance
Folding.....	uniformity, flushness, and accuracy
Collating.....	chart sequence, direction and count
Packaging.....	material, label positioning, and sealing
Manifest Mailing...	conformance to proper container
Distribution.....	correct count and correct product

7.7. Government Surveillance - The Government will conduct quality assurance surveillance to assure the effectiveness of the Contractor's control of quality. The Government will conduct on-site inspection visits at the Contractor's plant during the lithographic, finishing, and distribution phases and scheduled off-site product inspection of the priority advance verification copies. These visits may extend throughout the duration of the performance period. Nothing contained in this paragraph, 7.7. and in subparagraphs 7.7.A. and 7.7.B. shall be construed to limit any inspection rights of the Government specified under this contract.

A. The Government also reserves the right to conduct random unannounced visits at the Contractor's site(s) for the purpose of production surveillance. At no time, however, does the Government's inspection replace the Contractor's inspection requirements at either prime or sub-Contractor's installations.

B. The Contractor shall provide necessary workspace and assistance at the site of contract performance for Government Representative(s) who are designated by the COTR to inspect and evaluate the Contractor's work performance and products. All inspections and evaluations shall be performed in such a manner as will not unduly delay the work. Customer comments/complaints will provide the Government with a final form of contract surveillance.

7.8. Quality Standards for Negative Corrections/Contact Photography: This section contains guidance on the quality control for retouching Contractor-stored negatives and the photographic creation of same-size negatives and positives from the GFP. The Government authorizes the Contractor to retouch (opaque) those scratches and imperfections that result from the normal wear and tear of the negatives that the Contractor is instructed to store. The Contractor may be requested to make simple corrections by scribing on the GFP negatives, but ONLY upon special authorization by the COTR, alternate COTR, or Government Representative.

A. On occasion, the Government may require the Contractor to produce duplicate negatives or positives. This action may only take place upon the prior authorization by the COTR, Alternate COTR, or Government representative. The duplicate or reverse film image must be equal to the image on the GFP from which it was taken.

B. Inspection - Any Contractor modification to the GFP, even though authorized by this contract, shall undergo 100% inspection by Contractor personnel. All negatives that have been altered in any way must undergo complete visual inspection to assure the Government that no chart data has been obliterated or added by the correcting process. All negatives that have been generated by the Contractor must be completely inspected for image sharpness, scratches, pinholes, and film density.

C. Defect Evaluation Criteria

Class

Negative corrections

Contractor incorrectly opaques non-critical chart data.....	3
Contractor incorrectly opaques critical chart data.....	6

Scribed corrections are illegible, non-critical data.....	3
Scribed corrections are illegible for critical data or make critical data obscured or illegible.....	6
<u>Contact photography</u>	
Duplicate image does not match GFP image in sharpness, density, or is not free from foreign matter or scratches.....	6

7.9 Quality Standards for Platemaking: Quality control of the plate making operation is essentially one of assuring that the required negatives are used and that they are correctly positioned on the plate.

A. Inspection - Sampling procedures may not be used in the inspection of printing plates. Complete or 100 percent inspection must be made for each of the following characteristics:

- Completeness: All plates must be inspected to assure that all required negatives have been exposed.
- Resolution: All plates must be inspected to assure that specified dot size and line widths correspond with FAA/NACG - furnished negatives.
- Cleanliness: All plates must be inspected to assure that they are free from all foreign matter.

B. Defect Evaluation Criteria

	Class
<u>Layout:</u>	
Incorrect image placement.....	6
<u>Cleanliness:</u>	
Minor dirt scratches which would not detract from the product....	1
Major dirt or scratches which would detract from the product or make information difficult to read.....	3
Critical dirt or scratches which would make information impossible to read.....	6
<u>Image Resolution:</u>	
Dot size greater than $\pm .001$ inch.....	3
Line or type greater than $\pm .001$ inch.....	3

7.10. Quality Standards for Paper: The Contractor shall take whatever steps that are necessary to assure the Government that the paper used in this contract meets the standards contained in the Government Paper Specification Standards for E40 and G50 papers, as published by the Joint Committee on Printing (JCP), Congress of the United States.

A. Defect Evaluation Criteria - The following criteria for evaluation of defects applies to JCP E40, and G50 paper.

	Class
<u>Paper Stock:</u>	
Any deviation from specification basis weight.....	6
Wet tensile strength less than specification standard.....	6
Folding endurance less than specification standard.....	6
Bursting strength less than specification standard.....	6
Opacity less than specification standard.....	6
Any deviation from thickness standard.....	6
Water resistance less than standard.....	3
Smoothness less than standard.....	3
Writing quality less than standard.....	3
Erasing quality less than standard.....	3

7.11. Quality Standards for Ink: The Contractor shall take whatever steps are necessary to assure the

Government that the ink used in this contract meets the standards outlined in the following test procedures:

A. Color Match: In order to obtain reliable reflection readings for the color correctness test, a high quality simulated color print needs to be made. Sample prints made of the same color within an optical density of .03 of each other meet this requirement. The print may be made on a regular press, a proof press, or on an IGT Printability Tester. As an alternative, the wet ink test sample must visually match the wet Government furnished ink sample or the dry ink test sample must visually match the dry Government furnished sample in hue or value. The following Pantone Matching System (PMS) colors (or color numbers) match the colors of the required inks:

<u>Ink</u>	<u>PMS color (or color number)</u>
NOS Blue No. 310	PMS Reflex Blue
NOS Brown No. 510	PMS 498
NOS Black No. 001	PMS Black
NOS Green No. 225	PMS 354

B. Light Fastness: The light fastness test is made with an Atlas Fade-O-Meter, or equivalent, operated in accordance with the manufacturer's instructions. A simulated color print is prepared for exposure by masking part of the print with black or opaque tape. Exposure in the Fade-O-Meter for forty-eight (48) hours will yield a comparative evaluation of how well the color may stand up under actual sunlight. After exposure, the mask is removed and the color correctness test is made on both the exposed and unexposed area of the simulated color print. The numerical results are then compared with the PMS specification requirements.

C. Defect Evaluation Criteria

	Class
<u>Color Matching</u> :	
Tested sample does not match Government furnished sample in hue or value.....	6
<u>Light Fastness</u> :	
Tested sample does not match Government furnished sample in intensity after 48 hours in Fade-O-Meter....	6

7.12. Quality Standards for Printing: This section contains guidance regarding quality control of printing. The factors that must be controlled during printing are correct compositing, registration, and lithographic quality. The Contractor must have previously provided adequate control of the paper, ink, presses, press components, blankets, rollers and other press supplies necessary to produce a quality litho print.

- Process Standards - Standards and tolerances for printing are established for the elements of correct compositing, register, and lithographic quality. The measurements required in this chapter are to be made by use of shop microscopes, electronic densitometers, graduated scales, and visual comparison.
- Register - Tolerance for face to back up register is $\pm .020$ inch and for colors, must match punched negatives within a tolerance of $\pm .003$ inch.
- Ink Film Density - The density of the printed ink must conform to the standards set forth in 7.13.A.
- Lithographic quality The standard for lithographic quality is a condition in which quality of the printed matter duplicates the quality of the reproduction materials. It is characterized by sharp, clean printing, absence of smears, weak detail, missing detail, or any other factor that would be detrimental to the good appearance of the final lithographic sheet.

A. Inspection - Each printing sample must be inspected for correct compositing, registration, and litho quality. Inspection of samples from sheet press must be performed in-process as the sheets are produced. The balance of the inspection must be completed in a timely manner after the press run is completed and prior to the start of the next production operation.

- Register: Measurement of registration is performed with a shop microscope.
- Ink Film Density: Measurement is determined by a test procedure in which a GAM Reflection Densitometer, or equivalent, is used on a dry ink sample. Dark/light readings shall be the normal reading plus/minus .05.

Ink		Filter	Dark	Normal	Light
NOS Blue Ink No.	310	Red	1.00	.95	.90
NOS Brown Ink No.	510	Blue	1.00	.95	.90
NOS Black Ink No.	001	White	1.00	.95	.90
NOS Green Ink No.	225	Red	.80	.75	.70

- Lithographic quality - Measurement of lithographic quality is accomplished by visual examination of the printed sheet for the lithographic flaws noted. Each defect must be classified in accordance with the Defect Evaluation Criteria contained in 7.12.B.

B. Defect Evaluation Criteria

	Class
<u>Compositing</u>	
Any negative printed in the wrong color.....	6
<u>Registration</u>	
Back up registration deviation more than $\pm .020$ inch.....	3
Color registration deviation more than $\pm .003$ inch.....	3
<u>Ink Film Density</u>	
Densitometer readings are not within the standards set for the GAM (or equivalent) equipment.....	3
<u>Lithographic Quality</u>	
Defects of a minor degree such as scratches, hickies, weak print or holes.....	1
Major defects such as very weak but readable print or slightly plugged area (s)..	3
Critical defects such as print illegible or missing type, or plugged screens.....	6
<u>Image resolution</u> :	
Dot size greater than $\pm .003$ inch.....	6
Line or type greater than $\pm .003$ inch.....	6

7.13. Quality Standards for Negative Control: Since the quality of the finished product is directly related to the quality of the incoming negatives, it is to the Government's and the Contractor's advantage to resolve any quality problem related to deficiencies in negatives prior to printing production.

A. Inspection - Sampling may not be used in the inspection of incoming negatives. Incoming shipments of negatives must receive a 100% inspection for each of the following critical characteristics:

- **Count.** A count must be made, before removing the negatives from Government property, to determine that all necessary negatives have been received.
- **Identification.** Negatives must be inspected to be sure all are properly identified before the negatives are removed from Government property.
- **Condition.** All negatives must be inspected to be sure that they are unscratched, undamaged, and of suitable quality to produce acceptable printing (at Contractor's site).

- Register Marks. Inspection must be conducted to assure that all register marks required by specifications are included (at the Contractor's site).

B. Defect Evaluation Criteria

Class

Count:

Over or under required number.....notify COTR immediately

Identification:

Missing, incorrect, unreadable, etc. ..notify COTR immediately

Condition:

Scratched-usable..... 1

Damaged-usable..... 1

Scratched-not usable..... notify COTR immediately

Damaged-not usable..... notify COTR immediately

Other defects-not usable..... notify COTR immediately

Register Marks:

Not correct, missing, not usable, etc. notify COTR immediately

7.14. Quality Standards for Trimming: This section contains guidance for quality control of the trimming of the charts.

A. Inspection - Charts must be inspected by sampling to ensure that all charts are trimmed correctly. All inspections must be completed and corrections made prior to the start of the next production operation.

B. Defect Evaluation Criteria

Class

Oversize by 3/16 inch..... 1

Oversize in excess of 3/16 inch..... 3

Under specified size to edge of image - detail legible..... 1

Under specified size - image trimmed - detail illegible..... 6

7.15. Quality Standards for Folding: This section contains guidance for the quality control of the folding of the charts. Folds (creases) must be as loose as possible without affecting the flatness of the folded chart.

A. Inspection - Charts must be inspected by sampling to assure that all charts are folded correctly. All inspections must be completed and corrections made prior to the start of the next production operation.

- Folding. Panels are to be folded flush with each other and within the specified size with a tolerance of $\pm \frac{1}{8}$ inch.

B. Defect Evaluation Criteria

Class

Finished size:

Oversize or undersize to $\pm \frac{1}{8}$ inch..... 3

Oversize or undersize in excess of $\pm \frac{1}{8}$ inch..... 6

Type of fold:

Chart incorrectly folded..... 6

Uniformity:

All charts not folded the same..... 3

Flush edges:

Folded edges are not flush with one another..... 3

7.16. Quality Standards for Collating: All charts must be collated in accordance with consignee's requirement. The three major collations for the FAA/NACG customers must be banded.

A. Inspection - Random samples of collated charts must be inspected to assure that collations are correct.

B. Defect Evaluation Criteria

	Class
<u>Correct grouping of products</u>	
Products collated as stated on label.	6
<u>Banding</u>	
ELUS full set not banded or incorrectly banded	1
ELUS West set not banded or incorrectly banded.....	1
ELUS East set not banded or incorrectly banded.....	1

7.17. Quality Standards for Packaging: - All customer orders must be packaged according to specifications (as noted herein) in mailing containers/envelopes that meet specifications. All packages must be labeled so the label will not come off in the mailing process. The standards are correct quantities, method of packing, packaging materials, and method of labeling.

- Correct quantities - Every order must be filled with the exact charts and quantities indicated by the FAA/NACG or NGA pack lists or other instructions.
- Method of packing: Containers will not be over packed (top flap evenly folded at score) and will be compressed so that two top outer flaps join. Containers having less than solid maximum load shall be packed for minimum filler space and shipping weight with a lightweight filler material (i.e., KIMPACK, crumpled clean paper, etc.), to eliminate void areas and shifting loads with top outer flaps joining.
- Packaging of USPS shipments will conform to the provisions of the current Postal Manual and Postal Department packaging regulations and directives. The provisions of the Directory of International Mail will be applied. The Contractor must acquire the applicable Postal Department publications and directives from or through local Post Offices.

A. Packaging materials:

- Envelopes: Plain, mailer, double-grip, sulphate, natural colored, No. 1 Northern Draft, substance 32, Mullen strength to average two (2) points per pound or sixty-four (64) points for substance 32 (size as required for product being shipped), center seam with 32¼ in top flap, 1½ in bottom fold gummed solid to within ¼ in of edge.
- Bags (gusset configuration), size 12½ in x 7 in x 3 in, ½ in lip. Material: to be gatorhide 50/50 Kraft (double wall) paper or equal.
- Boxes for domestic shipments will be standard, corrugated, double-faced fiberboard, in adherence to the minimum standards set forth in the Domestic Mail Manual. Boxes for overseas shipments will be weather-resistant, Grade 200 or better fiberboard containers. (Container grades explained in Domestic Mail Manual).

B. Method of labeling:

- Labels must be correctly placed on the proper package and be legible. Packaging should be limited to one package per label and the label shall not be placed over flap joint. Labels shall be taped with clear tape that covers the entire label or firmly glued onto the package. USPS "Priority" labels shall be appropriately affixed to

qualifying packages.

C. Method of sealing:

- Reinforced tape shall be used to seal flaps on boxes and the ends of tubes (if tube end caps are not used), to ensure that containers will not open in transit.

D. Inspection - Sampling procedures may not be used in the inspection of distribution. Complete or 100% inspection must be made for each phase of the distribution process. Defects encountered must be reported to the COTR according to the following criteria:

- Count and Content: Number of packages and copies per individual package. Customer field reports, as noted in the Distribution Division Discrepancy Report, will be used to determine error rate.
- Method of Packing - Containers not overweight (per mailing mode regulations) or over-stuffed.
- Packaging Materials - Envelopes, bags, and boxes must adhere to Government specifications.
- Method of Labeling - Placement, legibility, and placement on correct package.
- Method of Sealing - Reinforced tape. In addition, plastic strapping shall be used, where appropriate.

E. Defect Evaluation Criteria

	Class
<u>Packing (Proper Order Filling)</u>	
error rate > .5% (greater than one half of one percent).....	6
<u>Packing (Method)</u>	
Improper sealing.....	6
Postal regulations not followed.....	6
<u>Packaging Materials</u>	
Packaging materials not conforming to specifications.....	6
Use of unauthorized materials.....	6
Filler inadequate to avoid damage.....	3
<u>Labeling:</u>	
Label placed improperly	3
Label missing, illegible or mislabeled.....	6

7.18. Quality Standards for Manifest Mailing: All packages destined for manifest mailing must be filled in accordance with pack list instructions and UPS, USPS, FedEx, or other shipper regulations, as applicable.

A. Inspection: UPS personnel may choose to select and check random samples from the packages identified in the UPS computer manifest. They will check for incorrect postage. At the Contractor's facility, USPS personnel may select and check random samples from the packages identified in the USPS manifest, based on official USPS sampling requirements. They will check for incorrect weight postage.

- The Contractor shall select and check random samples from the packages identified in the USPS manifest, based on official USPS sampling requirements. The Contractor shall check for incorrect weights and postage and determine the cause of any incorrect figures. The Contractor shall remedy any incorrect weights and postage that are due to improper filling of orders and shall forward a copy of their sampling sheets to the COTR.

B. Defect Evaluation Criteria

	Class
Put into wrong mail system	6
Wrong container (according to label instructions).....	6
Order filled with wrong product or incorrect number of right product.....	6
Failure to follow UPS regulations.....	6
Failure to follow USPS regulations.....	6

7.19. Quality Standards for Distributing/Shipping: This chapter contains guidance regarding quality control of chart distribution. The primary objective of distribution control is to place the charts in the hands of the user, prior to the effective date of the product.

- Process Standards - The standards for distribution are concerned with transporting packages to the correct destination in timely manner. The Contractor shall arrange with the necessary Postal Departments for periodic pick-up or receipt of shipments daily.
- In cases of shipments to foreign destinations, the Contractor will arrange for expeditious pick-up of packages, and the Contractor will comply with record requirements of the carrier(s).
- Every order must be placed into the proper carrier transportation system according to the distribution schedule noted in the contract.

A. Inspection -. Complete or 100% inspection must be made for each phase of the distribution process. Sampling procedures are unacceptable in the inspection of distribution. Defects encountered must be reported to the COTR according to the following criteria:

- Proper mode of carrier transportation used.
- Schedule met.

B. Defect Evaluation Criteria

	Class
Shipped by the wrong carrier.....	6
Failure to make distribution.....	6
Failure to release into carrier system by specified deadline with no action to ship by more rapid means.....	6

8.0. PERFORMANCE SCHEDULE

8.1. The Government shall transmit ASCII data files to the Contractor via FTP (see 5.3.1) no later than three (3) weeks prior to the effective date. The Contractor shall pick up negatives and other GFP (reference 4.1. and 4.3. and subsections thereunder) from 10201 Good Luck Road, Glenn Dale, MD. 20769-9700. The Contractor will be called by the COTR, or a specified Government representative as soon as this material is ready for pickup. This material will be ready for pick up not later than the Negative Pick up Date specified in 8.2. below.

Note: The Contractor may request early pickup, however the Government is not obligated to have negatives ready. Additionally, the Government may on occasion make some composite negatives available for early pick-up, if the Contractor so desires.

8.2. The required schedule shown below:

	NGA EDI Transmission Date	FAA EDI Transmission Date	Negative Pick Up Date	Distribution Date	EDI Confirmation Date	Effective Date
1 Year Basic Period	13-Mar-08	20-Mar-08	25-Mar-08	2-Apr-08	3-Apr-08	10-Apr-08
	8-May-08	15-May-08	20-May-08	28-May-08	29-May-08	5-Jun-08
	3-Jul-08	10-Jul-08	15-Jul-08	23-Jul-08	24-Jul-08	31-Jul-08
	28-Aug-08	4-Sep-08	9-Sep-08	17-Sep-08	18-Sep-08	25-Sep-08
	23-Oct-08	30-Oct-08	4-Nov-08	12-Nov-08	13-Nov-08	20-Nov-08
	19-Dec-08	26-Dec-08	30-Dec-08	7-Jan-09	8-Jan-09	15-Jan-09
	12-Feb-09	19-Feb-09	24-Feb-08	4-Mar-09	5-Mar-09	12-Mar-09
1st Option Period	9-Apr-09	16-Apr-09	21-Apr-09	29-Apr-09	30-Apr-09	7-May-09
	4-Jun-09	11-Jun-09	16-Jun-09	24-Jun-09	25-Jun-09	2-Jul-09
	30-Jul-09	6-Aug-09	11-Aug-09	19-Aug-09	20-Aug-09	27-Aug-09
	24-Sep-09	1-Oct-09	6-Oct-09	14-Oct-09	15-Oct-09	22-Oct-09
	19-Nov-09	27-Nov-09	1-Dec-09	9-Dec-09	10-Dec-09	17-Dec-09
	14-Jan-10	21-Jan-10	26-Jan-10	3-Feb-10	4-Feb-10	11-Feb-10
2nd Option Period	11-Mar-10	18-Mar-10	23-Mar-10	31-Mar-10	1-Apr-10	8-Apr-10
	6-May-10	13-May-10	18-May-10	26-May-10	27-May-10	3-Jun-10
	1-Jul-10	8-Jul-10	13-Jul-10	21-Jul-10	22-Jul-10	29-Jul-10
	26-Aug-10	2-Sep-10	7-Sep-10	15-Sep-10	16-Sep-10	23-Sep-10
	21-Oct-10	28-Oct-10	2-Nov-10	10-Nov-10	12-Nov-10	18-Nov-10
	16-Dec-10	23-Dec-10	28-Dec-10	5-Jan-11	6-Jan-11	13-Jan-11
	10-Feb-11	17-Feb-11	22-Feb-10	2-Mar-11	3-Mar-11	10-Mar-11

9.0. SCRAP MATERIALS

9.1. The Contractor is authorized to reuse or recycle scrap materials generated under this contract.

SECTION 2 – Electronic .PDF Files

10.0 PERFORMANCE OF WORK (PWS)

10.1. The Contractor shall provide the necessary experienced personnel, materials, equipment, and facilities, except as may be otherwise provided herein by the Government, and perform the necessary functions to provide the error-free lithographic, finishing, and distribution services listed below:

A. Lithographic Services include:

1. Platemaking
2. Printing
3. Negative Control
 - a. Download PDF files every 56-days

B. Finishing Services include:

1. Trimming
2. Folding
3. Collating

C. Distribution Services include:

1. Preparing shipping labels, order invoices, and mail manifests.
2. Packaging
3. Distributing/Shipping

10.2 The Contractor shall be responsible for the download of Government-furnished .PDF files from NACG ftp server, the completion of services shall meet FAA chart specifications, the delivery of finished products to Government reviewers and to mail carriers, prior to the FAA-established effective date.

10.3 The estimated quantity of charts to be provided for under this contract is approximately 800,000 charts every 56-days. The prescribed performance schedule for production and dissemination of the designated charts has been predetermined by the FAA, and set forth herein. **The Contractor shall strictly adhere to the performance schedule specified. Chart customers are military as well as civilian; therefore failure to meet the rigid schedule and production failure of the Contractor to perform as prescribed could possibly result in legal actions to which the Contractor and the Government are named as parties.**

10.4 A Call Order will be issued to the contractor for work to be performed during the printing cycle. The Contractor shall review and acknowledge the assignment by signing and returning the Call Order to the Contract Officer prior to commencement of work.

10.5 When the Government requires by reason of urgency, delivery of any quantity of an item covered by this contract, prior to the earliest specified delivery date, and if the Contractor will not accept an order for the accelerated delivery, the Government may procure this requirement from another source or by separate negotiations.

11.0. DEFINITIONS OF TERMS/ACRONYMS: As provided in Attachment 1 (3 pages)

12.0 APPLICABLE DOCUMENTS – The appendices are provided as references to the PWS as specified herein. In the event of conflict, this PWS shall take precedence over the referenced documents.

Appendix A - FAA/NACG EDI Formats (Tables 1-6)

Appendix B - NGA EDI Format

Appendix C - FAA/NACG Print Orders Report

Appendix D - Sample - Call Order

Appendix E - Joint Committee On Printing Paper Specification for JCP E-40, Chemical Wood Map Paper, Lithographic Finish

Appendix F - Joint Committee On Printing Paper Specification for JCP G-50, Translucent Bond (no less than 25% cotton, remainder chemical wood).

Appendix G - Estimated Chart and Collating Quantities Each Printing

Appendix H - Chart Trimming/Folding Diagram (all charts)

Appendix I - Sample - Contractor Generated FAA Pack List/Mailing Labels/Invoice

Appendix J - Sample - Contractor Generated NGA Mailing Labels

Appendix K - TI/1FA/C01: Technical Instructions For Packaging and Distribution of DoD Flight Information Publications, Books, Charts, and Related Publications, First Edition, May 2005

Appendix L - Sample - Invoice Authorization for Payment

Appendix O – Four Color Enroute Charts PDF File Tracking/Approval Record

13.0. GOVERNMENT FURNISHED PROPERTY - The Government will provide the following Government owned property to the Contractor for use in the performance of this contract:

13.1. Before and/or at the commencement of the initial printing cycle, the Government will furnish:

A. PDF files, for each chart, on NACG's ftp server.

B. Chart series number (odd numbers are for the face side and even numbers are for the back side).

13.2. On subsequent printing cycles the Government will only furnish:

A. PDF files, for each chart, on NACG's ftp server

13.3. For each printing cycle the Government will furnish:

A. ASCII data files via FTP and the Internet containing all information necessary to fulfill civilian customer orders including a Customer Information File and a Product Information File (see Appendix A).

B. The FAA/NACG will be responsible for providing the ASCII data files for civilian customers. NGA will be responsible for providing data files for military customers (see Appendix B).

C. Print order stating the specific quantities required for each chart and the specific quantities required for each major collation (see Appendix C).

D. A PDF file transfer list signed by the designated Government Representative and a Contractor Representative as specified in Appendix O, "Four Color Enroute Charts PDF File Record".

E. Call Order authorizing work to be performed (see Appendix D).

13.4. On request to the COTR, the Government will furnish wet or dry ink samples.

13.5. Upon receipt and inspection of the GFP, the Contractor shall sign and date a materials transfer/download check-off list indicating acceptance (see Appendix O).

13.6. Use of, maintenance of, liability for, and title to GFP and property acquired by the Contractor for the Government shall be as set forth in the "Government Property" clause of the contract. Upon receipt of the GFP, the Contractor shall carefully perform an inspection to determine whether material is acceptable. Any discrepancies shall immediately be brought to the attention of the COTR or Government Representative. Examples of such discrepancies are as follows:

A. The PDF files and/or customer and product data files, etc., were not ready on the date specified in the schedule.

B. Missing pdf files.

C. PDF file quality is not suitable for reproduction. The Contractor shall not be responsible for informational content of the pdf files. Upon receipt of GFP, the Contractor shall carefully perform an inspection to determine whether the material and data files are acceptable. Any discrepancies shall immediately be brought to the attention of the Contracting Officer's Technical Representative (COTR). After inspection, the Contractor shall sign and date a material transfer/negative check-off list indicating acceptance.

13.7. The Contractor may propose to the Contracting Officer an alternate system of production that would involve changing the GFP. Any changes to the methodology or GFP will be negotiated and incorporated into the contract by modification.

13.8. The Government may, at its discretion, recall any GFP in a manner so as not to unduly delay performance of the contract. In such a circumstance, the Contractor shall return all GFP requested within two (2) calendar days after request by the COTR or Alternate COTR. In cases of emergency, the COTR or Alternate COTR may request the GFP's return sooner than two (2) days. The Contractor shall return the GFP in accordance with shipping instructions from the COTR or Alternate COTR.

14.0. DESCRIPTION OF SERVICES - The Government will provide applicable GFP to the Contractor for performance of services identified below. The Government will assume full responsibility for the contents of the pdf files and for the condition of the GFP at the time it is transferred to the Contractor. The Contractor shall assume responsibility for all of the services described in the call order. These services include:

14.1. Lithographic Services

1. The Contractor shall allow no more than 2-3% in dot gain.

A. Quality Assurance of Contractor RIP – The contractor shall provide a post-RIP color proof or color plot to the Enroute Navigation Team for approval. Delivery of color proof or color plot shall be made three times a day until all PDFs have been put through the RIP process. The first delivery shall occur by 9:00 am, the second delivery shall occur at noon, and the third delivery shall occur by 3:00 pm.

B. Platemaking - The Contractor shall produce functionally satisfactory printing plates for use in the printing process.

C. Printing - The Contractor shall perform all printing operations in the production of and maintain product quality of all charts in accordance with the technical specifications. The Contractor shall use the lithographic offset printing process in the reproduction of the Enroute Charts.

1. General - Charts shall be printed face and back, head to head except EHUS 3/4, 5/6, 9/10, and 11/12, ELUS 19/20, 21/22, 25/26, 27/28, 29/30, 35/36 which prints head to foot.

2. Image placement on the sheet of paper shall be in accordance with the chart neckline. Back-up image placement on the sheet of paper shall be accomplished when the top and bottom neatlines and the left and right trim marks match one another.

3. Registration of color negatives will be to the Black (or any colors as determined by the Government) neckline by chart. Each negative will have corner marks to match the neckline which shall be used as registration marks. These marks are to be left on during the entire reproduction cycle and shall be used as basis for printing registration.

4. Color bars for each color shall be printed on each chart outside the chart's trim on the trailing edge of the sheet of paper. Color bars shall be a minimum (top to bottom) width of .635 cm (1/4 inch). Color Bars shall be printed as squares, rectangles, or circles. Color bars shall be printed in solid inks or as various screen percentage images. Color bars shall be evenly spaced across each sheet of paper. Colors shall be alternated across the sheet. Colors shall be repeated at least as frequently as every 7.62 cm (3 inches). For charts printed face and back, the color bars shall be printed on the face side at the trailing edge of the sheet of paper and on the back side at the trailing edge of the sheet of paper.

5. No Contractor credit note shall appear anywhere on the finished products.

6. Printing Inks as defined in the specifications shall be used in the printing of these charts. The specification standard for color match is set forth in 16.12.A. The specification standard for light fastness is set forth in 16.12.B. All charts (EHAK, EHUS, ELAK, ELUS, and Area) shall be printed in four (4) colors using:

NOS Blue - No. 310 (PMS Reflex Blue)
NOS Brown - No. 510 (PMS 498)
NOS Black - No. 001 (PMS Black)
NOS Green - No. 225 (PMS 354)

NOTE: (PMS colors/color numbers furnished for purposes of color matching only. The Government believes that PMS inks do not satisfy the light fastness requirement indicated in 17.12.B.).

D. Paper - All paper used in the production of the Enroute Charts shall be in accordance with the "Government Paper Specification Standard" published by the Joint Committee on Printing (JCP), Congress of the United States and as specified in Appendices E and F, respectively.

1. JCP paper specifications are revised from time to time. In the event that the specifications change

during the duration of the contract, the Government will allow the Contractor to substitute comparable paper of equal quality after samples are inspected and specifications are approved by the COTR. Paper specifications, in abbreviated form, are listed below:

a. JCP E-40 white chemical wood map lithographic paper, basis weight 22 lb.

b. JCP G-50 white translucent bond (no less than 25% cotton fiber) paper, basis weight 16 lb.

E. PDF Files – Download the PDF files every 56 days following the “PDF Files Available For Download” dates (See Performance Schedule 17.0)

14.2. Finishing Services (see Appendix H)

A. Trimming - The Contractor shall trim all charts to one of the finished sizes listed below without cutting off any printed image except the color bar and where the image is supposed to bleed off the chart.

1. 20 in x 60 in charts – ELUS 5/6, ELUS 9/10, ELUS 11/12, ELUS 13/14, ELUS 15/16, ELUS 17/18, ELUS 19/20, ELUS 21/22, ELUS 23/24, ELUS 27/28, ELUS 31/32, ELUS 33/34, ELUS 35/36.

2. 20 in x 55 in charts –EHUS 1/2, EHUS 3/4, EHUS 5/6, EHUS 7/8, EHUS 9/10, EHUS 11/12, ELUS 1/2, ELUS 3/4, ELUS 7/8, ELUS 25/26, ELUS 29/30, EHAK 1/2, ELAK 1/2, and ELAK 3/4.

3. 20 in x 50 in charts - Area 1/2

B. Folding - The Contractor shall uniformly fold all charts, except those designated on the print order as flat, using accordion type folds of 5 inches each (as specified below), and then one right angle fold, with the title panel of the odd numbered side on the outside, to form the finished folded chart size of 5 inches x 10 inches (see Appendix H). Folding machine calibrations should be set as loose as possible while maintaining the flatness necessary for mailing. Folding requirements are listed below:

1. Charts that are 20 inches x 60 inches shall require eleven (11) folds to form twelve (12) 5-inch panels.

2. Charts that are 20 inches x 55 inches shall require ten (10) folds to form eleven (11) 5-inch panels.

3. Charts that are 20 inches x 50 inches shall require nine (9) folds to form ten (10) 5-inch panels.

C. Collating - The Contractor shall collate the charts according to the instructions provided on each shipping label. The Contractor shall collate the ELUS Charts into sets in accordance with the instructions on each shipping label. The Contractor shall collate all three categories of the ELUS Chart sets and/or any combination of other charts, so that the final fold of each chart is at the same end and all charts are facing in numerical order with the index tabs face up. To ensure that each set arrives at the address of the consignee intact, the Contractor shall band the three categories of each ELUS set by the use of rubber bands or plastic bands or plastic wrap of sufficient strength. The Contractor shall have the option of banding or not banding any of the other collations. There are three (3) categories of these major collations:

1. Full set - Area and ELUS 1/2 through ELUS 35/36 (19 charts)

2. East set - Area, ELUS 15/16, ELUS 17/18, and L21/22 through ELUS 35/36 (11 charts)

3. West set - Area and ELUS 1/2 through ELUS 19/20 (11 charts)

14.3. Distribution Services

14.3.1. For NACG orders: The Government shall place data files containing FAA/NACG Customer Information and Product Information on its FTP server by no later than noon Thursday, 21 days prior to the effective date (see 17.0 Performance Schedule). Upon notification, via e-mail from the Government, the Contractor shall

retrieve these files via the Internet using FTP. If the FTP site is not accessible, the Government shall place the data files on a CD-ROM and deliver them to the contractor via overnight delivery service. The contractor will verify counts from EDI data with NACG prior to printing invoices and packing slips. From the data contained in these files (see Appendix A) the Contractor shall format and print order invoices/pack lists, shipping labels, and mail manifests. Print formats shall be approved by the Government.

A. Order Invoices/Pack Lists (see Appendix I) - The Contractor shall format and print order invoices and pack lists. The Government will specify the format for the order invoices. The Contractor format is acceptable for the pack list. The Contractor shall insert an order invoice in the first package of each order.

B. Shipping labels (see Appendix I) - The Contractor shall format and print shipping labels for all FAA/NACG customer orders. The format for the shipping labels shall be recommended by the Contractor but must be approved by the Government. All items printed by the Contractor shall be produced from laser or equivalent quality printers. The Government will specify print formats for all Contractor-printed materials other than shipping labels. The Contractor's proposed label format shall be submitted to the Government for approval prior to performance of the contract. New ADS requirements, address lines need to be at least 40 characters in length and require three address lines.

C. Bar Code Labels - The Contractor shall be required to apply or print a shippers bar code label with a tracking number (which shall be traceable to the order number) on each package. The Contractor shall fill orders so as to minimize the number of packages shipped to a customer and not exceed the maximum package weights established in the contract, as well as being consistent with other packaging specifications. The Contractor shall be responsible for obtaining carrier approval for the use of shipping labels and bar codes.

14.3.2. For NGA customer orders, NGA will place data files containing NGA customer and product information on its FTP server by no later than 28-days prior to the effective date (see 18.0 Performance Schedule). The Contractor shall retrieve these files via the Internet using FTP. The Contractor shall convert the NGA EDI data files from the NGA format (see Appendix B) to the FAA/NACG format (see Appendix A). From this data, the Contractor shall format and print pack lists, shipping labels, (see Appendix J) and mail manifests. Print formats, other than shipping labels, shall be approved by the Government. (NOTE: FAA/NACG and NGA may use different acronyms to identify the same product. The Government will provide a cross-reference between FAA/NACG and NGA nomenclature at the time of award).

A. The contractor shall determine the shipping mode of all NGA packages. NGA requires that all deliveries be at their destination 3-days prior to the effective date. All postage shall be charged to the appropriate NGA established postage/carrier accounts. The Contractor shall package all shipments that require a NGA label in strict accordance with Appendix K.

B. The Contractor shall send a confirmation file to NGA no later than Thursday, 7 (seven) days prior to the effective date. The confirmation file should include the following information: customer number, tracking number, if sent by traceable means, and the weight of each package. There will be one record for each package sent.

14.3.3. Mail Manifests - The Contractor must use a USPS approved scaled mail manifest system. The Contractor shall generate shipping and package tracking manifests for packages shipped by any carrier that provides shipping services for the Government. The mail manifest will be calculated from Government supplied data files, weight of packages determined by the Contractor, and Government tendered rate information maintained by the Contractor.

A. The Contractor shall complete, sign, and return to the USPS a "Mail Manifest System Application". Upon receipt of the "Mail Manifest System Agreement", the Contractor shall complete, sign, and return it to the USPS.

B. The Contractor shall deliver the UPS manifest with the final UPS delivery to the UPS representative in accordance with UPS rules and regulations. In the rare event that the Contractor needs to create a new label, the unique package identification number, weight, and postage must be added to the manifest proper and to the

summary at the end of the manifest. At the end of each printing/delivery cycle, the Contractor shall forward a copy of the UPS signed delivery form to the address below. UPS will invoice the postage costs to the Government based on the manifest.

FAA/NACG Distribution Division,
Attn: Traffic Manager, AJW-355
10201 Good Luck Road
Glenn Dale, MD 20769-9700

C. The Contractor shall deliver the USPS manifest with the final USPS delivery to the USPS representative in accordance with USPS rules and regulations. In the rare event that the Contractor needs to create a new label, the unique package identification number, weight, and postage must be added to the manifest proper and the summary at the end of the manifest. USPS will invoice the postage costs to the Government based on the manifest.

D. The Contractor shall deliver separate USPS manifests, one for FAA/NACG packages and one for NGA packages, with the final USPS delivery to the USPS representative in accordance with USPS rules and regulations. USPS will invoice the postage costs separately to the FAA/NACG and NGA accounts based on the manifest. USPS regulations require the Contractor to perform quality control sample checks for different categories of mail. The Contractor shall perform the necessary sampling checks, shall note those weights and postage amounts that differ from the manifest, and identify the reason for the discrepancy. The Contractor shall correct the discrepancy if it is determined to be Contractor error. The contractor shall forward a copy of the USPS quality control forms for the FAA and NGA shipments to the FAA/NACG Distribution Division, Traffic Manager, AJW-355 at the end of each printing/delivery cycle.

E. For FedEx shipments, the contractor shall use the FedEx Power Ship System. The contractor shall deliver the FedEx Power Ship System manifest with the final FedEx delivery to the FedEx representative, in accordance with FedEx rules and regulations. In the rare event that the contractor needs to create a new Airbill, a unique package identification number, weight, and postage must be added to the manifest proper and to the summary at the end of the manifest. The contractor shall forward a copy of the FedEx Power Ship System manifest to the FAA/NACG Distribution Division, Traffic Manager, AJW-355 at the end of each printing/delivery cycle. FedEx will invoice the postage costs separately to the FAA/NACG and NGA accounts based on the manifests.

14.3.4. Contractor Transmissions to the Government - The Contractor shall confirm receipt of the customer, order, and product information files via e-mail. This confirmation shall include the file name, total number of customers, the total product line item count and total product quantity for both Standing Orders and Subscriptions, and the total number of orders by each shipping mode.

A. The Contractor shall be required to transmit an ASCII data file (format specified by the Government, (see Appendix A) to the Government no later than Thursday, 7 (seven) days prior to the effective date. The Contractor shall immediately e-mail the Distribution Division that the confirmation file is available on the FTP site. This data shall confirm that each order has been fulfilled and that shipping has been completed. For each order reported as shipped, the Contractor shall transmit the order number, carrier, package weight, postage, package shipping date, and the package tracking number, if applicable. The Contractor shall also transmit the order number, GBL number, and date of shipment for all GBL shipments; and shall provide the order number and date of pick-up or delivery for all other shipments picked up at their loading dock, or that were delivered by the Contractor.

B. The Contractor shall provide an electronic version of each shipping manifest to the Government via FTP. The Government shall approve the shipping manifest format.

14.3.5. Carriers and Delivery Modes: Carriers and delivery modes by which orders are to be shipped shall be identified by codes contained in the data transmitted to the Contractor. These codes will be provided to the Contractor following contract award. The following are shippers currently used by the Government, but this list is subject to change at the discretion of the Government:

USPS - First Class, Priority Mail, Air Printed Matter, Air Parcel Post.

UPS - Ground Service

FedEx - Overnight Priority, International Overnight Priority, International Mail Service

Priority Post Company - International Priority Air Mail, Canada

Commercial Carriers - International air freight shipments made by Government Bill of Lading (GBL), Standard Form 1103-A (Rev. 4/85) or by commercial invoice.

14.3.6. Other Invoice/Shipping requirements: The Contractor may be required to prepare documentation for international or other shipments including but not limited to:

- Commercial invoices
- North American Free Trade Agreement
- Air-bills
- Certificates of Origin
- Shippers Security Endorsement

14.3.7. Distribution/Shipping - The Contractor shall complete all product distribution by midnight on the date specified as the Distribution Date (see 17.0. Performance Schedule) of the specifications. Distribution shall be considered as complete when released to the carrier or, for mail shipments, delivered to a post office. The Contractor shall ensure that shipments are released to the carrier by the required hour and date and that all carriers' vehicles have left the premises.

A. The Contractor shall meet the following mailing rules and regulations:

1. For USPS mailings, the United States Postal Service regulations as specified in the Domestic Mail Manual and the International Mail Manual;
2. For all UPS mailings, pamphlet titled "How to Use UPS"; and
3. For all packages shipped to NGA customers, the Contractor shall strictly abide by Appendix K, the NGA "Technical Instruction for Packaging and Distribution of DoD Flight Information Publications, Books, Charts, and Related Publications," dated May 2005. Service Manuals of other carriers used in the performance of this contract.

B. Shipments shall be limited to one package per address label. Each carton must be marked (1 of ____), (2 of ____), etc., to indicate the total number of cartons in the shipment. **The FAA/NACG order invoice or the NGA packing slip shall be placed in carton No. 1.**

14.3.8. Shipping and Postage Charges - The Government shall prepare and provide the Contractor with GBL's or other shipping documents authorizing commercial carrier ground or air freight shipments. Completed GBL's or other shipping documents will be forwarded to the Contractor who shall then arrange to have the shipment picked up by the designated carrier. **The yellow - Memorandum Copy - of the GBL or a copy of the other shipping document(s) shall be returned to the FAA/NACG Distribution Division, Traffic Manager, AJW-355, within two (2) days after the Distribution Date.**

A. The Contractor shall provide, install, and maintain a USPS approved package mailing system capable of producing uniform periodic reports of orders and all packages that have been tendered to a carrier. Reports shall include carrier name, order number, date of shipments, package weights, package tracking numbers, and shipping costs for each package. A separate report shall be required for each carrier; reports shall be sorted in ascending order by order number.

1. If a carrier requires a Contractor use a vendor-supplied system, the Contractor shall be responsible for acquiring and installing the appropriate hardware/software required, for example, the Power Ship System, in the case of packages tendered to FedEx.

2. The Contractor shall be required to update mailing system programs or data to reflect carrier rates, zones, zip codes, etc., whenever changes are announced or carriers are added. The Government currently receives discounted rates from several carriers that are subject to change. The Government shall provide to the Contractor the rates in effect following contract award and, thereafter, as changes are received.

14.3.9. Packaging - The Contractor shall package all individual charts or sets of charts or bulk shipment of charts exactly as instructed by the type and quantity printed on each pack list or print order.

A. Four weeks after contract award, the Contractor shall submit to the Government the following information for each package: length, width, height, weight (empty), and maximum number of items to be packed in each. Upon Government approval, this will become the standard for packaging. NO CHANGES from this standard will be permitted without prior approval of the COTR.

B. The Contractor shall use packaging and filler of sufficient strength so as to ensure that the consignee's chart order arrives intact and undamaged. In addition, plastic strapping shall be used on all boxes, where appropriate.

14.3.10 Labeling and Marking - The Contractor shall be required to neatly label and mark packages and shipments and provide, prepare, and affix labels, stickers, or forms, for all packages and shipments. Pressure sensitive, self-adhering labels shall be utilized where available.

A. Shipping labels shall be firmly affixed to the widest surface of all packages. No part of the shipping label shall be placed over a seam or on top of sealing tape and no part may obstruct or be obstructed by other labels, stickers, markings, or banding.

B. When there are multiple packages in an order, the invoice shall be placed in the first package and it shall have the words "Invoice Enclosed" on either the label or stamped on the label-side of the package.

C. USPS stickers (i.e., Priority Mail, Par Avion, etc.) must be applied to all USPS shipments. Stickers shall be placed directly above and to the center of the shipping label to designate USPS delivery service and to ensure proper handling by the USPS. In lieu of the stickers, priority packages must be identified by incorporating the word "Priority" on the label or on the package.

D. All shipping envelopes, bags, and cartons shall be preprinted or labeled with the message:

**U.S. GOVERNMENT
CHARTS/PUBLICATIONS
CRITICAL TO NAVIGATION
SAFETY DO NOT DELAY**

This message shall be 15 point Bold Caps, surrounded with a 1/16 inch solid border, and printed in black ink. Placement shall be in the upper left portion of the address side of shipping envelopes and bags, and in the upper top and sides of rectangular cartons.

14.3.11. Special copies - Three types of special copies of printed charts, not identified by mailing labels, shall be placed into the distribution system in accordance with the following requirements:

A. Priority advance verification copies - These press proofs, for Government review, shall be good quality press sheets, printed on one side only, untrimmed, and unfolded with the color bar or ball intact.

1. Eight (8) copies of each chart shall be delivered to two (2) addresses in the Washington DC area - six [6] shall be sent to the Enroute Navigation Branch, 1305 East West Highway, Silver Spring, MD 20910-3281 and two [2] shall be sent to the Reproduction Division, 10201 Good Luck Road, Glenn Dale, MD 20769-9700 as specified by the COTR.

2. The copies shall be hand delivered. Priority advance verification copies shall be delivered daily, as they come off of the press, until all charts are printed. All charts printed prior to 2:00 p.m. must be delivered that day in time for the next weekday delivery. Any chart printed after 2:00 p.m. may be held and delivered the next day.

3. For shipping purposes, priority advance verification copies shall be rolled and placed in tubes. The Government will reimburse the Contractor for overnight delivery at the rates quoted in the pricing schedule. These copies SHALL NOT be considered part of the ordered quantity as stated in the print order.

B. Advance copies - These copies are printed, trimmed and folded charts (printed on both sides). The Contractor shall ship, by overnight courier service or hand delivery, two (2) copies of each chart to the Government representative in the Enroute Navigation Team and two (2) copies to the Government representative at the Reproduction Division. Advance copies must be among the first copies out of the finishing operation and must be mailed within four (4) hours of folding. Advance copies shall be considered part of the ordered quantity identified in the print order shelf stock.

C. Shelf stock copies - These copies, identified in the print order, may be flat (printed both sides) or folded. The shelf stock copies must be received by the Government's distribution Contractor by 2:00 p.m. on the distribution date; however, delivery of shelf stock must not interfere with the distribution to regular customers. The distribution Contractor, Parson's, 10201 Good Luck Road, Glenn Dale, Maryland accepts deliveries Monday through Friday, 7:00 a.m. to 3:00 p.m. (If a change in the Government's distribution Contractor results in added transportation costs to the Contractor, the Contractor may request an equitable adjustment in the contract price).

1. Shelf stock shipments shall be placed in cartons and secured to skids or pallets. No more than one chart number should be put in a carton. Each carton is to be marked as to publication, date of edition and number of copies. The Contractor shall mark each carton as "1 of _____," "2 of _____," etc., to indicate the total number of cartons in the shipment. The small quantity of each chart that does not completely fill a carton shall be packed separately in its own container.

2. The Contractor shall generate a delivery document, for the shelf stock shipments, identifying the number of boxes for each chart without identifying the quantity of charts in the boxes, and shall deliver the document to the Government's distribution Contractor along with the bulk shipment of shelf stock.

D. In case of shortages - If a quantity shortage is apparent to the Contractor at the time of distribution because the shipping quantities called for on the pack list exceeds the print order quantities, the Contractor shall notify the COTR with the following information and obtain a determination on how to proceed:

1. Type and quantity of chart in short supply and/or
2. Name and addresses of consignee(s) not being filled.

E. For replacement charts ordered to correct Government errors or to fill emergency needs, the Government will reimburse the Contractor at the rates stated in the contract. All associated shipping costs shall be charged to the Government.

F. The Contractor shall bear the cost of replacement charts, packing, and shipping to correct Contractor errors.

G. The Contractor shall replace shortages due to Contractor error from the Contractor's site.

14.3.12. Late Distribution : The Contractor shall immediately notify the COTR when the Contractor anticipates difficulty in complying with the contract delivery schedule or date, or when the Contractor has knowledge that any actual or potential situation may delay or threaten to delay the timely performance of the Contract. The Contractor shall then send a written follow-up to the CO and the COTR, stating what products and quantities will be/are late, the number and location of the consignees involved, and when the material will be ready for shipment. Nothing contained herein shall be construed as a waiver by the Government of any delivery schedule or date or of any rights or remedies provided by law or under this Contract.

NOTE: No charts (except for priority advance verification copies and advance copies) shall be mailed until all priority advance verification copies have been reviewed by the COTR or his designated Government representative, and that representative has given verbal authorization to mail. However, notwithstanding the above, under no circumstances shall the charts be held beyond the mailing deadline.

14.3.13. Return Shipments and Correspondence - Under UPS regulations, the Contractor's name shall appear on the return address of the labels. Thus the Contractor shall be required to accept undelivered, returned packages. The Contractor shall handle returned shipments and correspondence or other material intended for the Government as follows:

A. FAA/NACG returned shipments. All returned packages must be reported to FAA/NACG, Distribution Division, Public Sales and Services Group (301) 436-8301 as soon as possible. The Contractor shall provide FAA/NACG with the customer account number and the reason for the return. FAA/NACG will attempt to contact the customer to verify the address and to see if the package can be re-shipped.

- Re-ships. FAA/NACG will fax a re-shipment request to the Contractor by 3:30 pm for shipments due out that day. All re-shipments shall be sent out via overnight carrier (FedEx).
- Re-ship responsibility. Procedures for determining which party is responsible for the cost of the re-ship are as follows:
 1. The order has been miss-packed, contains the wrong product, or has an incomplete order; the Contractor is responsible and the Contractor shall use their overnight delivery account to re-ship the package.
 2. The address provided by FAA/NACG is incorrect or incomplete; FAA/NACG is responsible and the FAA/NACG distribution contractor, Parson's, will send out a replacement order. The Contractor shall remove the invoice or packing list, if any, the shipping label, and the carrier's explanation for return and fax them to the FAA/NACG Distribution Division, Public Sales and Services Group (301) 436-6329. Contents of the returned shipments shall normally be destroyed by the Contractor. From time to time, the Contractor may be required to deliver returned shipments to the Distribution Division intact.
 3. The package was shipped by the distribution date, but was not received by the effective date; FAA/NACG is responsible and the FAA/NACG distribution contractor, Parson's, will send out a replacement order via overnight delivery service.

B. Correspondence or other material erroneously mailed to the Contractor's facility but intended for the FAA/NACG Distribution Division such as items returned by sales agents for credit, shall be delivered to the FAA/NACG Distribution Division within five (5) days following receipt by the Contractor.

C. NGA return shipments. All returned packages must be reported to NGA as soon as possible. The Contractor shall provide NGA with the customer account number and reason for the return. NGA will attempt to contact the customer to see if the package can be re-shipped.

- NGA re-ships. Re-shipments are made to customers that have not received their order by the

effective date. NGA will fax a re-shipment request to the Contractor by 3:30 pm for shipments due out that day. All re-shipments shall be sent out via overnight carrier (FedEx).

- NGA re-ship responsibility. Determining which party is responsible for the cost of the re-ship is handled as follows:

1. The order has been miss-packed, contains the wrong product, or has an incomplete order; the Contractor is responsible, use the Contractor's overnight delivery account.
2. The address provided by NGA is incorrect or incomplete; NGA is responsible, use NGA's overnight delivery account.
3. The package was shipped by the distribution date, but has not been received by the customer; FAA/NACG is responsible and the FAA/NACG distribution contractor will send out a replacement order via overnight delivery service.

D. The return address for all NGA packages shipped to NGA customers is: DDRV-N, 8000 Jefferson Davis Highway, Warehouse 66, Bay D, Richmond, Virginia 23297-5900. The only exception is for those packages shipped by UPS. All UPS packages must have the distribution contractor's address as the return address (see 5.3.13.A.).

15.0 DESCRIPTION OF DELIVERABLES

15.1. Using Lithographic offset printing, the Contractor shall produce the following United States Government aeronautical charts. The following identifies the medium on which they are to be printed:

A. On E-40 22 lb white chemical wood map lithographic paper (see Appendix E):

1. Area Chart - U.S.: 1 chart; A1/A2.
2. Enroute Low Altitude - U.S. chart series: 18 charts; ELUS 1/2, ELUS 3/4, ELUS 5/6, ELUS 7/8, ELUS 9/10, ELUS 11/12, ELUS 13/14, ELUS 15/16, ELUS 17/18, ELUS 19/20, ELUS 21/22, ELUS 23/24, ELUS 25/26, ELUS 27/28, ELUS 29/30, ELUS 31/32, ELUS 33/34, and ELUS 35/36.
3. Enroute High Altitude - U.S. chart series: 6 charts; EHUS 1/2, EHUS 3/4, EHUS 5/6, EHUS 7/8, EHUS 9/10, EHUS 11/12.
4. Enroute Low Altitude - Alaska chart series: 2 charts; ELAK 1/2 and ELAK 3/4.
5. Enroute High Altitude - Alaska chart: 1 chart; EHAK 1/2.
6. Enroute Low Altitude – Caribbean and South American chart series: 4 charts; ELCSA 1/2, ELCSA 3/T3, ELCSA 5/6, ELCSA 7/8
7. Area Chart – Caribbean: 1 chart; ESCAA T1/T2
8. Enroute High Altitude – Caribbean and South America chart series: 2 charts; EHCSA 1/2, EHCSA 3/4
9. Enroute Planning Chart – Pacific, Australasia, and Antarctica: 1 chart; EPPAA 1

B. On G-50 16 lb white translucent bond (at least 25% cotton fiber) paper (see Appendix F) printed on face only subject to minor changes. Transluents required each cycle will be listed in the Print Orders Report and included with the Call Order documents (see Appendix D).

C. Product sizes - Each chart shall be in one of these three sizes:

1. 20 inches x 60 inches
2. 20 inches x 50 inches
3. 20 inches x 55 inches

D. Printed in four (4) colors, on one (1) or two (2) sides of the paper, folded to 5 inches x 10 inches using accordion-type folds with one (1) or two (2) right angle folds. Charts printed on G-50 are not folded.

15.2. Printing and distribution quantities: The Contractor shall furnish to the Government all the products set forth in this contract that are called for by Call Orders (see Appendix D). Specific quantities of each chart per production cycle will be identified in print orders (see Appendix C) in accordance with the provisions herein.

A. Precise quantities for any chart cannot be accurately predicted prior to the issuance of the print order. The Government DOES NOT guarantee any minimum or maximum quantities for any individual chart under the contract. However, the guaranteed minimum quantity for each contract period (i.e., base period; option period) shall be no less than 2,800,000 charts and the maximum quantity for each contract period shall not exceed 16,000,000 charts.

B. The quantities of each chart are estimates only and are not purchased hereby. In the event the Government's requirements for supplies/services do not result in the quantities specified in Appendix G, such an event shall not constitute the basis for an equitable price adjustment under this contract.

C. The Contractor shall be required TO RETAIN printing overruns for four (4) weeks after the delivery date associated with the printing. The Government reserves the option to purchase from the Contractor, during this four (4) week period, any or all of the overrun charts at the applicable rates stated in the pricing schedule. All remaining printing overruns must be destroyed (rendered unusable) no later than the next PDF download date.

15.3 Call Orders shall be completed within the time frame specified in the Call Order, and the rights and obligations of the Contractor and the Government regarding those orders shall be governed by the terms of the contract.

15.4. *The Government reserves the option to phase in additional products and/or phase-out products listed in this contract. In either case, the Government will provide 30-day notice to the Contractor when any change occurs.*

16.0. QUALITY CONTROL/QUALITY ASSURANCE

ATTENTION: CONTRACTOR IS CAUTIONED: THE ACCURACY OF THE INFORMATION ON THESE CHARTS IS OF PARAMOUNT IMPORTANCE. ERRORS INCORPORATED ONTO THE CHARTS COULD JEOPARDIZE THE SAFETY NOT ONLY OF AIRCRAFT, BUT COULD BE THE PRIMARY FACTOR IN LOSS OF LIFE OR PROPERTY, AND COULD ALSO JEOPARDIZE THE NATION'S MILITARY READINESS AND SAFETY. TO ACHIEVE MAXIMUM ACCURACY IN THE CHARTS, THE CONTRACTOR'S QUALITY CONTROL PROGRAM MUST BE ORGANIZED TOWARD THE OBJECTIVE OF REACHING A GOAL OF ZERO DEFECTS IN EACH AND EVERY PRODUCT.

16.1. The Contractor shall be responsible for the control of product quality and adherence to production standards during all phases of work identified in 14.0. Description of Services. FAA/NACG has provided quality standards, based on a system of "defects" for all work phases identified under 14.0. Description of Services. The quality standards are provided to prevent defects from occurring by conducting in-process inspections, self evaluation, and corrective action, when appropriate, before extensive correction or rework is required.

16.2. The Government is responsible for the cartographic content of the charts and the condition of the GFP at the time of transfer to the Contractor. Acceptance of the supplies/services is solely the responsibility of the government.

16.3. All deviations of the final deliverable products (specifications, standards, or process) whether classified herein or not, must be called to the attention of the COTR, immediately upon their discovery. Specific quality standards begin with 16.4.

16.4. Quality Standards: Any imperfection, deficiency, flaw, lack of completeness, or other undesirable condition is considered a variance from the specifications or standards. The Contractor is required to deliver products and services free from defect. Reasonable tolerance ranges have been established for all production phases and are provided herein. Products outside of these tolerances result in defects that are classified into three groups as follows:

- A. Critical - A critical defect (No. 6) is one that either
 - judgment and experience indicate could result in hazardous or unsafe conditions for individuals
 - using the products, or could prevent performance of a navigational function
 - or is a serious departure from specifications, established standards, or average process capability.
- B. Major - A major defect (No. 3) is a defect, other than critical, that either
 - could materially reduce the usability of the unit of product for its intended purpose, or
 - is a significant deviation from specifications, established standards or average process capability, or
 - materially affects the appearance of the charts.
- C. Minor - A minor defect (No. 1) is one that either does not
 - materially reduce the usability of the product for its intended purpose, or
 - is a departure from established standards or specifications having no significant bearing on the intended use, or
 - affects the appearance only to a minor degree.

16.5. Disposition - When a departure from specified contract requirements exceeds the tolerance limits in workmanship, the service is defective and the terms of this contract have been violated. As soon as the Contractor recognizes a defect in the final product, whether identified specifically herein or not, the Contractor shall immediately notify the COTR or Alternate COTR. No remedies contained herein shall preclude the Government from any and all other remedies available to the Government by law or under the terms of this contract. Disposition, whether defect is recognized by the Contractor, the Government, or customer complaints, shall be as follows for each defect category:

A. If a critical defect is discovered before the distribution deadline, the Contractor must immediately notify the COTR or Alternate COTR. Charts with known No. 6 defects must never be distributed unless this action has been directed by the COTR. The Contractor, if at fault and if necessary to meet the effective date deadline, will bear the additional postage costs to ship the charts by a faster mode of transportation.

B. If a critical defect is discovered after the distribution deadline, the Contractor must immediately notify the COTR or Alternate COTR. The Contractor, if at fault, will bear the additional costs of curing each No. 6 defect, including the additional postage costs required to ship the charts by a faster mode of transportation to meet the effective date deadline and, if required, the cost of printing and distributing a Special Notice (which alerts chart users to the defect).

C. If a major defect is discovered at any time, the Contractor must immediately notify the COTR or Alternate COTR, who will determine if the chart needs to be reprinted. If it does, 16.5.A., will apply.

D. If a minor defect is discovered, the Contractor shall notify the COTR or Alternate COTR on the next working day, but may proceed with the distribution, unless otherwise notified by the COTR or Alternate COTR.

E. If a defect is discovered which has not been classified in this document, the Contractor must immediately notify the COTR who will assign a classification based on the severity of the defect. The COTR will then determine the proper disposition.

16.6 Contractor Surveillance - The Contractor shall have in place its own quality control plan covering the charts, GFP, raw materials, and equipment. The quality control plan shall describe the plan of action for the 100 percent inspection stations and sampling techniques and plan of action for the Sample Inspection stations. The Contractor shall comply with its own quality control plan during contract performance. The COTR will periodically verify the system to see if the Contractor is complying with the quality control plan. The Contractor's quality program can be disapproved whenever the system's procedures do not accomplish their objectives.

A. The Contractor's quality control system used in the printing, finishing and distribution phases of the contract must ensure that:

- The charts are produced from quality raw materials (paper and ink)
- The charts are in conformance with all specified requirements of the contract
- The charts are distributed to the correct recipient in exact quantities by the date specified by the Government.

B. 100 Percent Inspection - The Contractor shall establish and maintain a system of inspection at key points in the printing, finishing, and distribution processes. The list of inspection stations shown are key points in the inspection system. They must be installed and maintained as an integral part of the production process. Items processed in the following phases of production require complete or 100 percent inspection:

- Negative corrections/contact photography (if applicable)
- Platemaking
- Download and examination of GFP PDF files

C. Sample Inspection - The quality level of production lots in the printing, trimming, folding, and collating processes will be determined by use of sampling procedures. All samples shall be inspected for compliance with specification standards.

D. Sample Selection - Samples must be selected at random to reflect the quality of the production. The following program may be used as a basis for the Contractor's sampling program:

<u>STATION:</u>	<u>PRIMARY QUALITY CHARACTERISTICS:</u>
Printing.....	proper compositing, registration, and litho quality
Raw Materials.....	equal to specifications
Trimming.....	size and appearance
Folding.....	uniformity, flushness, and accuracy
Collating.....	chart sequence, direction and count
Packaging.....	material, label positioning, and sealing
Manifest Mailing...	conformance to proper container
Distribution.....	correct count and correct product

16.7. Government Surveillance - The Government will conduct quality assurance surveillance to assure the effectiveness of the Contractor's control of quality. The Government will conduct on-site inspection visits at the Contractor's plant during the lithographic, finishing, and distribution phases and scheduled off-site product inspection of the priority advance verification copies. These visits may extend throughout the duration of the performance period. Nothing contained in this paragraph, 16.7. *and in subparagraphs 16.7.A. and 16.7.B. shall be construed to limit any inspection rights of the Government specified under this contract.*

A. The Government also reserves the right to conduct random unannounced visits at the Contractor's site(s) for the purpose of production surveillance. At no time, however, does the Government's inspection replace the

Contractor's inspection requirements at either prime or sub-Contractor's installations.

B. The Contractor shall provide necessary workspace and assistance at the site of contract performance for Government Representative(s) who are designated by the COTR to inspect and evaluate the Contractor's work performance and products. All inspections and evaluations shall be performed in such a manner as will not unduly delay the work. Customer comments/complaints will provide the Government with a final form of contract surveillance.

16.8. Quality Standards for Negative Corrections/Contact Photography: This section contains guidance on the quality control for retouching Contractor-stored negatives and the photographic creation of same-size negatives and positives from the GFP. The Government authorizes the Contractor to retouch (opaque) those scratches and imperfections that result from the normal wear and tear of the negatives that the Contractor is instructed to store. The Contractor may be requested to make simple corrections by scribing on the GFP negatives, but ONLY upon special authorization by the COTR, alternate COTR, or Government Representative.

A. On occasion, the Government may require the Contractor to produce duplicate negatives or positives. This action may only take place upon the prior authorization by the COTR, Alternate COTR, or Government representative. The duplicate or reverse film image must be equal to the image on the GFP from which it was taken.

B. Inspection - Any Contractor modification to the GFP, even though authorized by this contract, shall undergo 100% inspection by Contractor personnel. All negatives that have been altered in any way must undergo complete visual inspection to assure the Government that no chart data has been obliterated or added by the correcting process. All negatives that have been generated by the Contractor must be completely inspected for image sharpness, scratches, pinholes, and film density.

C. Defect Evaluation Criteria

	Class
<u>Negative corrections</u>	
Contractor incorrectly opaques non-critical chart data.....	3
Contractor incorrectly opaques critical chart data.....	6
Scribed corrections are illegible, non-critical data.....	3
Scribed corrections are illegible for critical data or make critical data obscured or illegible.....	6
<u>Contact photography</u>	
Duplicate image does not match GFP image in sharpness, density, or is not free from foreign matter or scratches.....	6

16.9 Quality Standards for Platemaking: Quality control of the plate making operation is essentially one of assuring that the required negatives are used and that they are correctly positioned on the plate.

A. Inspection - Sampling procedures may not be used in the inspection of printing plates. Complete or 100 percent inspection must be made for each of the following characteristics:

- Completeness: All plates must be inspected to assure that all required negatives have been exposed.
- Resolution: All plates must be inspected to assure that specified dot size and line widths correspond with FAA/NACG - furnished negatives.
- Cleanliness: All plates must be inspected to assure that they are free from all foreign matter.

B. Defect Evaluation Criteria

	Class
<u>Layout</u> :	
Incorrect image placement.....	6
<u>Cleanliness</u> :	
Minor dirt scratches which would not detract from the product....	1
Major dirt or scratches which would detract from the product or	

make information difficult to read.....	3
Critical dirt or scratches which would make information impossible to read.....	6
<u>Image Resolution:</u>	
Dot size greater than $\pm .001$ inch.....	3
Line or type greater than $\pm .001$ inch.....	3

16.10. Quality Standards for Paper: The Contractor shall take whatever steps that are necessary to assure the Government that the paper used in this contract meets the standards contained in the Government Paper Specification Standards for E40 and G50 papers, as published by the Joint Committee on Printing (JCP), Congress of the United States.

A. Defect Evaluation Criteria - The following criteria for evaluation of defects applies to JCP E40, and G50 paper.

	Class
<u>Paper Stock:</u>	
Any deviation from specification basis weight.....	6
Wet tensile strength less than specification standard.....	6
Folding endurance less than specification standard.....	6
Bursting strength less than specification standard.....	6
Opacity less than specification standard.....	6
Any deviation from thickness standard.....	6
Water resistance less than standard.....	3
Smoothness less than standard.....	3
Writing quality less than standard.....	3
Erasing quality less than standard.....	3

16.11. Quality Standards for Ink: The Contractor shall take whatever steps are necessary to assure the Government that the ink used in this contract meets the standards outlined in the following test procedures:

A. Color Match: In order to obtain reliable reflection readings for the color correctness test, a high quality simulated color print needs to be made. Sample prints made of the same color within an optical density of .03 of each other meet this requirement. The print may be made on a regular press, a proof press, or on an IGT Printability Tester. As an alternative, the wet ink test sample must visually match the wet Government furnished ink sample or the dry ink test sample must visually match the dry Government furnished sample in hue or value. The following Pantone Matching System (PMS) colors (or color numbers) match the colors of the required inks:

<u>Ink</u>	<u>PMS color (or color number)</u>
NOS Blue No. 310	PMS Reflex Blue
NOS Brown No. 510	PMS 498
NOS Black No. 001	PMS Black
NOS Green No. 225	PMS 354

B. Light Fastness: The light fastness test is made with an Atlas Fade-O-Meter, or equivalent, operated in accordance with the manufacturer's instructions. A simulated color print is prepared for exposure by masking part of the print with black or opaque tape. Exposure in the Fade-O-Meter for forty-eight (48) hours will yield a comparative evaluation of how well the color may stand up under actual sunlight. After exposure, the mask is removed and the color correctness test is made on both the exposed and unexposed area of the simulated color print. The numerical results are then compared with the PMS specification requirements.

C. Defect Evaluation Criteria

	Class
<u>Color Matching:</u>	
Tested sample does not match Government furnished sample in hue or value.....	6
<u>Light Fastness:</u>	
Tested sample does not match Government furnished sample in	

16.12. Quality Standards for Printing: This section contains guidance regarding quality control of printing. The factors that must be controlled during printing are correct compositing, registration, and lithographic quality. The Contractor must have previously provided adequate control of the paper, ink, presses, press components, blankets, rollers and other press supplies necessary to produce a quality litho print.

- Process Standards - Standards and tolerances for printing are established for the elements of correct compositing, register, and lithographic quality. The measurements required in this chapter are to be made by use of shop microscopes, electronic densitometers, graduated scales, and visual comparison.
- Correct compositing The standard for correct compositing is the previous printed chart, unless notified by the COTR that a change has taken place.
- Register - Tolerance for face to back up register is $\pm .020$ inch and for colors, must match punched negatives within a tolerance of $\pm .003$ inch.
- Ink Film Density - The density of the printed ink must conform to the standards set forth in 7.13.A.
- Lithographic quality The standard for lithographic quality is a condition in which quality of the printed matter duplicates the quality of the reproduction materials. It is characterized by sharp, clean printing, absence of smears, weak detail, missing detail, or any other factor that would be detrimental to the good appearance of the final lithographic sheet.

A. Inspection - Each printing sample must be inspected for correct compositing, registration, and litho quality. Inspection of samples from sheet press must be performed in-process as the sheets are produced. The balance of the inspection must be completed in a timely manner after the press run is completed and prior to the start of the next production operation.

- Correct compositing: Measurement is taken by visual cross examination of the printed chart with the same chart's previous printed edition.
- Register: Measurement of registration is performed with a shop microscope.
- Ink Film Density: Measurement is determined by a test procedure in which a GAM Reflection Densitometer, or equivalent, is used on a dry ink sample. Dark/light readings shall be the normal reading plus/minus .05.

Ink		Filter	Dark	Normal	Light
NOS Blue Ink No.	310	Red	1.00	.95	.90
NOS Brown Ink No.	510	Blue	1.00	.95	.90
NOS Black Ink No.	001	White	1.00	.95	.90
NOS Green Ink No.	225	Red	.80	.75	.70

- Lithographic quality - Measurement of lithographic quality is accomplished by visual examination of the printed sheet for the lithographic flaws noted. Each defect must be classified in accordance with the Defect Evaluation Criteria contained in 16.12.B.

B. Defect Evaluation Criteria

	Class
<u>Compositing</u>	
Any negative printed in the wrong color.....	6
<u>Registration</u>	

Back up registration deviation more than $\pm .020$ inch.....	3
Color registration deviation more than $\pm .003$ inch.....	3
<u>Ink Film Density</u>	
Densitometer readings are not within the standards set for the GAM (or equivalent) equipment.....	3
<u>Lithographic Quality</u>	
Defects of a minor degree such as scratches, hickies, weak print or holes.....	1
Major defects such as very weak but readable print or slightly plugged area (s)..	3
Critical defects such as print illegible or missing type, or plugged screens.....	6
<u>Image resolution:</u>	
Dot size greater than $\pm .003$ inch.....	6
Line or type greater than $\pm .003$ inch.....	6

16.13. Quality Standards for Negative Control: Since the quality of the finished product is directly related to the quality of the incoming pdf files, it is to the Government's and the Contractor's advantage to resolve any quality problem related to deficiencies in pdf files prior to printing production.

A. Inspection - Sampling may not be used in the inspection of incoming pdf files. Incoming shipments of pdf files must receive a 100% inspection for each of the following critical characteristics:

- Count. A count must be made, before final print, to determine that all necessary PDF files have been received.
- Identification. PDF must be inspected to be sure all are properly identified before printing.
- Condition. All PDFs must be inspected to be sure that they are print ready.
- Register Marks. Inspection must be conducted to assure that all register marks required by specifications are included (at the Contractor's site).

B. Defect Evaluation Criteria

Class

Count:

Over or under required number.....notify COTR immediately

Identification:

Missing, incorrect, unreadable, etc. ...notify COTR immediately

Condition:

Defects-not usable..... notify COTR immediately

Register Marks:

Not correct, missing, not usable, etc. notify COTR immediately

16.14. Quality Standards for Trimming: This section contains guidance for quality control of the trimming of the charts.

A. Inspection - Charts must be inspected by sampling to ensure that all charts are trimmed correctly. All inspections must be completed and corrections made prior to the start of the next production operation.

B. Defect Evaluation Criteria

Class

Oversize by $3/16$ inch.....	1
Oversize in excess of $3/16$ inch.....	3
Under specified size to edge of image - detail legible.....	1
Under specified size - image trimmed - detail illegible.....	6

16.15. Quality Standards for Folding: This section contains guidance for the quality control of the folding of the charts. Folds (creases) must be as loose as possible without affecting the flatness of the folded chart.

A. Inspection - Charts must be inspected by sampling to assure that all charts are folded correctly. All inspections must be completed and corrections made prior to the start of the next production operation.

- Folding. Panels are to be folded flush with each other and within the specified size with a tolerance of $\pm \frac{1}{8}$ inch.

B. Defect Evaluation Criteria

	Class
<u>Finished size:</u>	
Oversize or undersize to $\pm \frac{1}{8}$ inch.....	3
Oversize or undersize in excess of $\pm \frac{1}{8}$ inch.....	6
<u>Type of fold:</u>	
Chart incorrectly folded.....	6
<u>Uniformity:</u>	
All charts not folded the same.....	3
<u>Flush edges:</u>	
Folded edges are not flush with one another.....	3

16.16. Quality Standards for Collating: All charts must be collated in accordance with consignee's requirement. The three major collations for the FAA/NACG customers must be banded.

A. Inspection - Random samples of collated charts must be inspected to assure that collations are correct.

B. Defect Evaluation Criteria

	Class
<u>Correct grouping of products</u>	
Products collated as stated on label.	6
<u>Banding</u>	
ELUS full set not banded or incorrectly banded	1
ELUS West set not banded or incorrectly banded.....	1
ELUS East set not banded or incorrectly banded.....	1

16.17. Quality Standards for Packaging: - All customer orders must be packaged according to specifications (as noted herein) in mailing containers/envelopes that meet specifications. All packages must be labeled so the label will not come off in the mailing process. The standards are correct quantities, method of packing, packaging materials, and method of labeling.

- Correct quantities - Every order must be filled with the exact charts and quantities indicated by the FAA/NACG or NGA pack lists or other instructions.
- Method of packing: Containers will not be over packed (top flap evenly folded at score) and will be compressed so that two top outer flaps join. Containers having less than solid maximum load shall be packed for minimum filler space and shipping weight with a lightweight filler material (i.e., KIMPACK, crumpled clean paper, etc.), to eliminate void areas and shifting loads with top outer flaps joining.
- Packaging of USPS shipments will conform to the provisions of the current Postal Manual and Postal Department packaging regulations and directives. The provisions of the Directory of International Mail will be applied. The Contractor must acquire the applicable Postal Department publications and directives from or through local Post Offices.

A. Packaging materials:

- Envelopes: Plain, mailer, double-grip, sulphate, natural colored, No. 1 Northern Draft, substance 32, Mullen strength to average two (2) points per pound or sixty-four (64) points for substance 32 (size as required for product being shipped), center seam with 3 1/4 in top flap, 1 1/2 in bottom fold gummed solid to within 1/4 in of edge.
- Bags (gusset configuration), size 12 1/2 in x 7 in x 3 in, 1/2 in lip. Material: to be gatorhide 50/50 Kraft (double wall) paper or equal.
- Boxes for domestic shipments will be standard, corrugated, double-faced fiberboard, in adherence to the minimum standards set forth in the Domestic Mail Manual. Boxes for overseas shipments will be weather-resistant, Grade 200 or better fiberboard containers. (Container grades explained in Domestic Mail Manual).

B. Method of labeling:

- Labels must be correctly placed on the proper package and be legible. Packaging should be limited to one package per label and the label shall not be placed over flap joint. Labels shall be taped with clear tape that covers the entire label or firmly glued onto the package. USPS "Priority" labels shall be appropriately affixed to qualifying packages.

C. Method of sealing:

- Reinforced tape shall be used to seal flaps on boxes and the ends of tubes (if tube end caps are not used), to ensure that containers will not open in transit.

D. Inspection - Sampling procedures may not be used in the inspection of distribution. Complete or 100% inspection must be made for each phase of the distribution process. Defects encountered must be reported to the COTR according to the following criteria:

- Count and Content: Number of packages and copies per individual package. Customer field reports, as noted in the Distribution Division Discrepancy Report, will be used to determine error rate.
- Method of Packing - Containers not overweight (per mailing mode regulations) or over-stuffed.
- Packaging Materials - Envelopes, bags, and boxes must adhere to Government specifications.
- Method of Labeling - Placement, legibility, and placement on correct package.
- Method of Sealing - Reinforced tape. In addition, plastic strapping shall be used, where appropriate.

E. Defect Evaluation Criteria

	Class
<u>Packing (Proper Order Filling)</u>	
error rate > .5% (greater than one half of one percent).....	6
<u>Packing (Method)</u>	
Improper sealing.....	6

Postal regulations not followed.....	6
<u>Packaging Materials</u>	
Packaging materials not conforming to specifications.....	6
Use of unauthorized materials.....	6
Filler inadequate to avoid damage.....	3
<u>Labeling:</u>	
Label placed improperly	3
Label missing, illegible or mislabeled.....	6

16.18. Quality Standards for Manifest Mailing: All packages destined for manifest mailing must be filled in accordance with pack list instructions and UPS, USPS, or other shipper regulations, as applicable.

A. Inspection: UPS personnel may choose to select and check random samples from the packages identified in the UPS computer manifest. They will check for incorrect postage. At the Contractor's facility, USPS personnel may select and check random samples from the packages identified in the USPS manifest, based on official USPS sampling requirements. They will check for incorrect weight postage.

- The Contractor shall select and check random samples from the packages identified in the USPS manifest, based on official USPS sampling requirements. The Contractor shall check for incorrect weights and postage and determine the cause of any incorrect figures. The Contractor shall remedy any incorrect weights and postage that are due to improper filling of orders and shall forward a copy of their sampling sheets to the COTR.

B. Defect Evaluation Criteria

	Class
Put into wrong mail system	6
Wrong container (according to label instructions).....	6
Order filled with wrong product or incorrect number of right product.....	6
Failure to follow UPS regulations.....	6
Failure to follow USPS regulations.....	6

16.19. Quality Standards for Distributing/Shipping: This chapter contains guidance regarding quality control of chart distribution. The primary objective of distribution control is to place the charts in the hands of the user, prior to the effective date of the product.

- Process Standards - The standards for distribution are concerned with transporting packages to the correct destination in timely manner. The Contractor shall arrange with the necessary Postal Departments for periodic pick-up or receipt of shipments daily.
- In cases of shipments to foreign destinations, the Contractor will arrange for expeditious pick-up of packages, and the Contractor will comply with record requirements of the carrier(s).
- Every order must be placed into the proper carrier transportation system according to the distribution schedule noted in the contract.

A. Inspection -. Complete or 100% inspection must be made for each phase of the distribution process. Sampling procedures are unacceptable in the inspection of distribution. Defects encountered must be reported to the COTR according to the following criteria:

- Proper mode of carrier transportation used.

- Schedule met.

B. Defect Evaluation Criteria

	Class
Shipped by the wrong carrier.....	6
Failure to make distribution.....	6
Failure to release into carrier system by specified deadline with no action to ship by more rapid means.....	6

17.0. PERFORMANCE SCHEDULE

17.1. The Government shall transmit ASCII data files to the Contractor via FTP (see 14.3.1) no later than three (3) weeks prior to the effective date. The Contractor shall download the PDF files (reference 13.1. and 13.3. and subsections thereunder) from an FAA FTP site. The Contractor will be called by the COTR, or a specified Government representative as soon as this material is ready for download. This material will be ready for downloading not later than the PDF file Download Date specified in 17.2. below.

Note: The Contractor may request early download, however the Government is not obligated to have PDF files ready.

17.2. The required schedule shown below:

	NGA EDI Transmission Date	FAA EDI Transmission Date	PDF File Download Date	Distribution Date	EDI Confirmation Date	Effective Date
1 Year	13-Mar-08	20-Mar-08	20-Mar-08	2-Apr-08	3-Apr-08	10-Apr-08
Basic	8-May-08	15-May-08	15-May-08	28-May-08	29-May-08	5-Jun-08
Period	3-Jul-08	10-Jul-08	10-Jul-08	23-Jul-08	24-Jul-08	31-Jul-08
	28-Aug-08	4-Sep-08	4-Sep-08	17-Sep-08	18-Sep-08	25-Sep-08
	23-Oct-08	30-Oct-08	30-Oct-08	12-Nov-08	13-Nov-08	20-Nov-08
	19-Dec-08	26-Dec-08	26-Dec-08	7-Jan-09	8-Jan-09	15-Jan-09
	12-Feb-09	19-Feb-09	19-Feb-08	4-Mar-09	5-Mar-09	12-Mar-09
1st	9-Apr-09	16-Apr-09	16-Apr-09	29-Apr-09	30-Apr-09	7-May-09
Option	4-Jun-09	11-Jun-09	11-Jun-09	24-Jun-09	25-Jun-09	2-Jul-09
Period	30-Jul-09	6-Aug-09	6-Aug-09	19-Aug-09	20-Aug-09	27-Aug-09
	24-Sep-09	1-Oct-09	1-Oct-09	14-Oct-09	15-Oct-09	22-Oct-09
	19-Nov-09	27-Nov-09	27-Nov-09	9-Dec-09	10-Dec-09	17-Dec-09
	14-Jan-10	21-Jan-10	21-Jan-10	3-Feb-10	4-Feb-10	11-Feb-10
2nd	11-Mar-10	18-Mar-10	18-Mar-10	31-Mar-10	1-Apr-10	8-Apr-10
Option	6-May-10	13-May-10	13-May-10	26-May-10	27-May-10	3-Jun-10
Period	1-Jul-10	8-Jul-10	8-Jul-10	21-Jul-10	22-Jul-10	29-Jul-10
	26-Aug-10	2-Sep-10	2-Sep-10	15-Sep-10	16-Sep-10	23-Sep-10
	21-Oct-10	28-Oct-10	28-Oct-10	10-Nov-10	12-Nov-10	18-Nov-10
	16-Dec-10	23-Dec-10	23-Dec-10	5-Jan-11	6-Jan-11	13-Jan-11
	10-Feb-11	17-Feb-11	17-Feb-10	2-Mar-11	3-Mar-11	10-Mar-11

18.0. SCRAP MATERIALS

18.1. The Contractor is authorized to reuse or recycle scrap materials generated under this contract.

19.0. POST AWARD CONFERENCE

19.1. The Contractor may be required to attend a post award conference for the purpose of final orientation and introductions of the key Government personnel. If necessary, the conference will be held in the Washington, DC metropolitan area within three (3) to seven (7) days after contract award at a time and place to be determined by the Government. Transportation to the post award conference shall be at the Contractor's expense.

ATTACHMENT 1

DEFINITIONS OF TERMS/ACRONYMS

ACT - Aeronautical Chart Team (a component of the National Aeronautical Charting Group)

Alternate COTR - Government representative specifically named to act in place of the COTR, in the event the COTR is unavailable.

Area - Area Chart

Aviation System Standards - Parent FAA organization of the National Aeronautical Charting Group.

Bulk shipment - the charts ordered by NACG, termed "shelf stock" on the print order, which are shipped, in bulk, to NACG's distribution Contractor. These charts are used to fill the orders of customers who are not a part of the regular print order.

Call Order - Government document that identifies work to be performed each printing cycle.

Chart - a sheet of paper with an image printed on the face side and another image printed on the back side or an image printed on the face side and nothing on the back side, for example:

- A. Area 1/2 is one chart with 1 as the face and 2 as the back;
- B. ELUS 7/8 is one chart with 7 as the face and 8 as the back.

CO - Contracting Officer. The Government representative specifically authorized by legal warrant to negotiate on behalf of the Federal Government.

Copies - The quantity of any chart printed, finished and distributed.

COTR - Contracting Officer's Technical Representative. The Government representative specifically designated to represent the Contracting Officer on technical matters. The COTR is authorized to monitor the contract and to speak directly to the Contractor on technical matters.

Defect - Any imperfection, deficiency, flaw, lack of completeness, or other undesirable condition, within reasonable tolerance ranges, that is considered at variance with the specifications or standards. Defects have been classified into minor, major, and critical.

Distribution date - The deadline by which all shipments must be out of the Contractor's facility and into the mailing system.

DoD - Department of Defense

Dot gain/loss - change in size of the diameter of the dots in a dot screen.

Effective date - The date and time, established by international agreement, when one edition of aeronautical products becomes obsolete and the next edition must be in use.

EHAK - Enroute High Altitude Alaska chart(s)

EHUS - Enroute High Altitude conterminous United States chart(s)

ELAK - Enroute Low Altitude Alaska Chart(s)

ELUS - Enroute Low Altitude conterminous United States Chart(s)

FAA - Federal Aviation Administration

Face or Back - the image that is printed on one side of a chart (face refers to the odd numbers and back refers to the even numbers of the chart): e.g., ELUS 15 is a face; EHAK 2 is a back.

Fade-o-meter - device used by ink manufacturers to evaluate an ink's resistance to fading when exposed to light.

FedEx - Federal Express

FTP - File Transfer Protocol

GBL - Government Bill of Lading - an obligating document that allows the freight company to bill the Government directly for transportation costs

GFP - Government Furnished Property, including all equipment and materials provided by the Government.

Government representative - Person(s) specifically designated to represent the Government on detailed technical matters. Although the COTR and Alternate COTR are Government representatives, the term shall be used in this contract to refer to persons other than the COTR or Alternate COTR. Government representative(s) are stationed in Glenn Dale, MD, and in Silver Spring, MD.

Hand delivery - Direct delivery from the Contractor's facility to the COTR, Alternate COTR, or designated Government representative by the Contractor.

Head to Foot - The bottom of one chart backs up to the top of the other chart. The printed chart would turn over top to bottom.

Head to Head - The top side of a chart backs up to the top of the chart on the other side. The printed chart would turn over side to side.

JCP - Joint Committee on Printing

Lithographic negatives - negatives which are wrong-reading on the emulsion side.

Major collation - any one or any combination of 4 different collations of the ELUS Charts:

- A. Full set - Area and ELUS 1/2 through ELUS 35/36 (19 charts)
- B. East set - Area, ELUS 15/16, ELUS 17/18, ELUS 21/22 through ELUS 35/36 (11 charts)
- C. West set - Area and ELUS 1/2 through ELUS 19/20 (11 charts)

National Aeronautical Charting Group - a component of FAA, Aviation System Standards.

Neatline - the thin borderline enclosing the mapped area.

Negative __ or Neg __ - a composite of one line negative and one screen negative which forms one color element or

screened color element of a face or back of a chart.

NGA – National Geospatial-Intelligence Agency

Normal wear and tear - Deterioration due to routine use of the item, as determined by the COTR, Alternate COTR, or Government Representative.

Pack list - The part of the order that identifies the charts ordered by each customer.

PMS - Pantone Matching System

Print Order - The NACG-generated document (Print Orders Report) that identifies, for a single production cycle, the number of copies to print for each chart and the number of collations that are required. Identified in Appendix C.

Printing overruns - Products printed in excess of the quantity ordered, including products printed to allow for spoilage in the printing and finishing process.

Priority advance verification copies - untrimmed, unfolded press proof sheets that are sent to designated locations for the Government's cartographic review and consent for release.

Quality Assurance - Follow-up measures by the Government to guarantee acceptable quality services and products.

Quality Control - Follow-up measures by the Contractor to guarantee acceptable quality in services and products.

RIP – Raster Image Processing

(Screen) **XL** - **Y**% - **Z**^o - in describing a dot screen, refers to X lines per inch, Y percent of color, and Z screen angle.

Shelf stock - see bulk shipment

Slip sheet - a blank sheet of paper slipped between negatives to prevent abrasion; slip sheet should be approximately the same size as the negative

PWS - Performance Work Statement. Section C in the Government's uniform contract format that describes the specifications to perform the work.

UPS - United Parcel Service

USPS - United States Postal Service